

SYDNEY HARBOUR NATIONAL PARK
PLAN OF MANAGEMENT

National Parks and Wildlife Service
Sydney, NSW

October 1998

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FOREWORD

Sydney Harbour National Park contains landscapes of great beauty, historic places of national and state significance, Aboriginal sites, wildlife habitats and rare plants of scientific and educational interest. The park is also a major recreational resource for the people of Sydney and attracts many Australian and international visitors.

This plan of management emphasises the conservation, use and interpretation of the range of historic places within the park. Increased public access to significant historic sites such as the Quarantine Station, Fort Denison, Goat Island and the major fortifications on Middle Head and Bradleys Head will be promoted.

A range of facilities will be provided in the park to cater for visitor use. While these facilities will cater for the expected high numbers of visitors during the Olympic Games, an emphasis has been placed on constructing facilities which will be required for the medium to long term. Temporary facilities may be provided to cater for peak events.

The plan also places a high priority on the maintenance of the scenic values of Sydney Harbour National Park when viewed from both the land and the water and on the restoration and interpretation of the significant natural values of the park. A weed control program and a fire management plan will be prepared, and controls have been put in place to protect the natural areas of the park.

This plan of management establishes the scheme of operations for Sydney Harbour National Park. In accordance with the provisions of Section 75 of the National Parks and Wildlife Act 1974, this plan of management is hereby adopted.

PAM ALLAN, MP

**MINISTER FOR THE
ENVIRONMENT**

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1. INTRODUCTION

The National Parks and Wildlife Act 1974 requires a plan of management to be prepared for each national park. A plan of management is a legal document that outlines how the area will be managed in the years ahead.

The procedures for adoption of a plan of management are specified in the Act and involve five stages:

- * The Director-General gives notice that a plan of management has been prepared;
- * The plan is placed on public exhibition for at least one month and any person may comment on it;
- * The plan and copies of all representations are referred to the National Parks and Wildlife Advisory Council for consideration;
- * The Director-General submits the plan, together with the recommendations of the Advisory Council, to the Minister;
- * The Minister may adopt the plan, with or without amendment, after considering the recommendations of the Advisory Council or may refer the plan back to the Director-General and Council for further consideration.

Once a plan has been adopted by the Minister, no operations may be undertaken within Sydney Harbour National Park except in accordance with the plan.

A plan of management for Sydney Harbour National Park was placed on public exhibition from 23rd February to 27th May 1996. The exhibition of the draft plan attracted 286 submissions which raised a total of 22 issues. All comments received were referred to the National Parks and Wildlife Advisory Council for its consideration and advice. The comments and suggestions of the Advisory Council were in turn considered by the Minister when adopting this plan of management for Sydney Harbour National Park.

The planning process leading to the development of this plan involved the collection and use of a large amount of information, which for reasons of document size, has not been included in the plan. For additional information or enquires on any aspect of the plan, contact the Service's Sydney District Office at Greycliffe House in Nielsen Park or by phone on (02) 9337 5511.

2. MANAGEMENT CONTEXT

2.1 NATIONAL PARKS IN NEW SOUTH WALES

The national park concept was introduced into Australia through the establishment of Royal National Park in 1879.

The International Union for the Conservation of Nature and Natural Resources (IUCN) defines a national park as a:

"natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area, and (c) provide a foundation for spiritual, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible" (IUCN, 1994).

National parks are part of the regional pattern of land use. The management of a national park aims at minimising disturbance to natural and cultural resources; other land uses, e.g. agriculture, forestry and mining, are distinguished by an acceptance or encouragement of environmental modification. National parks therefore provide for only a limited part of the range of land uses in a region.

2.2 SYDNEY HARBOUR NATIONAL PARK

2.2.1 Location and Context

Sydney Harbour National Park covers 393 hectares of headlands, beaches and islands in and around Sydney Harbour. It is surrounded by suburbs, defence reserves, industrial and commercial developments and marine facilities. It also adjoins a number of conservation and open space reserves managed by local councils.

The current extent of Sydney Harbour National Park is shown on the park map (centre pages). The park covers four major headlands on the northern side of the harbour (North Head, Dobroyd Head, Middle/Georges Head and Bradleys Head), and two major headlands on the southern side of the harbour (South Head and Nielsen Park), as well as a number of smaller, separate areas of land on both sides of the harbour. It also includes five islands within the harbour: Clark Island, Shark Island, Rodd Island, Goat Island and Fort Denison.

The proposal to establish one national park around Sydney Harbour, incorporating all public foreshore lands, was first raised by the National Trust in 1968. In 1975 Sydney Harbour National Park was established over parts of North Head, Dobroyd Head, Bradleys Head, Shark Island and Clark Island in order to protect the scenic gateway to the city and the remnant vegetation of Sydney Harbour. In 1979, following negotiations with the Commonwealth Government, land previously used for defence purposes was added to the park, and various other parcels of land have

since been added. The most recent additions were Fort Denison and Goat Island, which were reserved as part of the park in 1995.

The Commonwealth-State Land Exchange Agreement of 1979 identified a number of other areas for inclusion in the park, including land within the School of Artillery at North Head and within 10 Terminal Regiment at Middle Head. A committee has been established under the Environmental Planning and Assessment Act to review future use of North Head and the recommendations of the committee have been placed on public exhibition. A planning study to investigate options for future use of public land at Middle Head and Georges Heights was also on public exhibition in 1996. Although not specifically mentioned in this plan, if added to Sydney Harbour National Park these lands will be managed in accordance with the general policies and actions in this plan of management.

Conservation plans will be prepared for each precinct added to the park and placed on public exhibition and, if necessary, an amendment to this plan of management will be prepared and placed on public exhibition at the same time to provide for any proposals not consistent with the policies and actions in this plan.

Sydney Harbour National Park contains not only landscapes of great beauty but historic sites of national and state significance, geomorphological sites, wildlife habitats and rare plant species of scientific and educative interest. The waters of the harbour, while not within the park, are an essential element to understanding and appreciating Sydney Harbour National Park and provide both a link and a barrier between the different sections of the park.

Sydney presently has a population of around 3.6 million people, which is expected to increase to around 4.6 million by 2011. Sydney Harbour National Park is a major recreational resource for the people of Sydney, particularly those residing in the nearby suburbs. It also attracts many Australian and international visitors, especially to the main lookout areas and increasingly to its walking tracks, while even greater numbers enjoying viewing the park from harbour cruises. It is estimated that there are approximately 2 million visits to the park each year.

Sydney Harbour National Park is one of a group of national parks in the Sydney metropolitan area, which includes Botany Bay, Ku-ring-gai Chase, Garigal, Lane Cove and Royal National Parks, that conserve sections of the coastline, the harbour and sandstone environments with a range of Aboriginal sites, historic places, native plants and animals and habitats

2.2.2 Importance of Sydney Harbour National Park

Sydney Harbour National Park is a significant component of Sydney Harbour, which together with a number of smaller foreshore parks and reserves, protects a scenic resource of national importance.

Sydney Harbour National Park is listed on the Register of the National Estate for its combination of foreshores, cliffs, headlands, heath and gully forests, recreation

opportunities, Aboriginal engravings, defence history and its associations with the development of Sydney. A number of places within the park have been individually listed on the Register of the National Estate, including the Quarantine Station, North Head and Bradleys Head fortifications, Clark, Shark and Rodd Islands, and a number of places in Ashton Park.

These places are also listed by the National Trust (NSW), as are Fort Denison; the ammunition store complex, harbour masters cottage and water police station on Goat Island; the fortifications on Middle Head; fortifications on Shark Point; Greycliffe House and the Hornby Lighthouse cottages.

Sydney Harbour National Park is characterised by massive sandstone headlands at the entrance to the harbour, with gentler slopes and beaches inside the harbour. The park provides a scenic backdrop of rocky cliffs, natural vegetation, cultural plantings and grassed clearings to the harbour. The variety and beauty of the scenery confers a distinctive character on Sydney and its harbour, and is an essential element in their attractiveness as a tourist destination.

The natural vegetation protected in Sydney Harbour National Park is a remnant of the coastal vegetation which once covered the harbour foreshores and contains a variety of plant and animal communities. Five rare plant species, and a number of significant and vulnerable plant communities, occur in the park. The park is however surrounded and threatened by urban development. To protect the natural values of the park active measures are needed to re-establish vegetation in degraded areas and to promote sympathetic land use practises on adjoining private and public land.

The park is part of a system of natural and semi-natural lands which provide important wildlife habitat in the middle of the city. Approximately 150 bird species have been recorded in the park, and the long-nosed bandicoot colony on North Head is one of the few remaining in Sydney. In many cases the park provides the only secure areas where native animals can find seclusion and breeding sites.

The park contains evidence of Aboriginal occupation and about 70 sites, ranging from art to occupation sites, have been recorded. European settlement had a disastrous impact on the Aborigines living around the harbour. They were forced off traditional food gathering areas and introduced diseases and warfare caused a rapid reduction in the Aboriginal population around Sydney. The remaining Aboriginal sites are significant evidence of the way of life of the original occupants, of which little was recorded by Europeans at contact, and they are of contemporary importance to Aboriginal people.

The park contains rare and impressive evidence of the convict contribution to the development of the colony in the Queens Magazine, cooperage and barracks on Goat Island. The protection of Sydney from invasion was a major concern of early governors. The first fortification within the park was built at Georges Head in 1801. Over succeeding years defences were progressively upgraded and expanded. Defence facilities were built on all headlands within the park and on Fort Denison. The Middle Head/Georges Head complex is particularly important because it

contains a range of places which illustrate changes in the defence of Sydney from 1801 until World War II.

As the settlement at Sydney grew, remote areas were needed to isolate potentially dangerous activities. Many of the headlands, islands and remote parts of the harbour were reserved for defence and explosives storage, quarantining of people to protect residents from transmission of disease, quarantining of animals, and scientific research. The Quarantine Station on North Head is of particular significance.

Public concern over alienation of the foreshore and islands of the harbour commenced in the 1840s. In 1879 Shark, Clark and Rodd Islands were dedicated as public reserves. In 1905 the Harbour Foreshores Vigilance Committee was established and, following a Royal Commission in 1908, land at Dobroyd Head, Bradleys Head and Vacluse was resumed for public recreation under the management of local trusts. Additional land was gradually transferred from uses such as quarantine and defence to the trusts and a number of important buildings, such as Greycliffe House, were added to the public estate. In 1975 many of the public lands on the islands and foreshores of Sydney Harbour were together declared as Sydney Harbour National Park under the management of the National Parks and Wildlife Service.

The park is important as an outstanding recreational resource for residents of Sydney and visitors to the city. It is the most readily accessible national park in NSW, well served by public transport, and attracts around 2 million visitors each year. The high visibility of the park from the harbour and the panoramic views offered from its lookouts and walking tracks makes Sydney Harbour National Park an important national and international tourist destination.

The cultural and natural values of the park, and its location within a major population centre in close proximity to many schools and tertiary institutions, provide significant opportunities for promotion, education and research.

The significance of Sydney Harbour National Park can be summarised as:

Landscape Values

- * Sydney Harbour National Park protects much of the scenic backdrop to Sydney Harbour.
- * The park comprises a varied landscape of outstanding scenic value, which includes spectacular sandstone cliffs and headlands, small sandy beaches and rocky foreshores, natural vegetation, grassed clearings and historic structures and plantings.

Historic Value

- * Sydney Harbour National Park contains historic places illustrating important phases in the development of Sydney and the nation, from its first settlement by Europeans. These demonstrate the themes of immigration, navigation, defence, quarantine, maritime industry and settlement.
- * Sites of recognised national historic significance in the park include the Quarantine Station, the Middle Head/Georges Head complex of fortifications and the ammunition magazines on Goat Island. Fort Denison, Bradleys Head, Nielsen Park and the other islands within the park also contain places of high historical and interpretive value.
- * More than 20 other historic places in the park have been identified in the Sydney and Middle Harbours Regional Environmental Plan as being of state or regional significance.

Archaeological Value

- * The park contains evidence of Aboriginal occupation of what is now one of the most developed parts of Australia.
- * The Aboriginal sites within the park demonstrate aspects of life in the area before and immediately after European settlement.

Ecological Value

- * The native bush within the park is an important indicator of the species present in the Sydney area before it was developed.
- * Sydney Harbour National Park protects five rare plant species, and vegetation communities of high scientific value.
- * The park provides valuable habitat in the centre of Sydney for a number of native birds and animals.
- * It complements other land reserved for nature conservation in the Sydney metropolitan area.

Tourist and Recreational Value

- * Sydney Harbour National Park is an important tourist destination for national and international visitors to Sydney, who are attracted by its scenery, bushland and historic places.
- * The park is an important recreational area for locals from neighbouring suburbs, as well as a valuable regional recreational resource for Sydneysiders from further afield.

Educational and Research Values

- * Sydney Harbour National Park provides significant opportunities for interpretation of the natural environment and cultural heritage of Sydney.
- * It also provides opportunities for field studies and research within easy travel distance of many schools, colleges and universities.

3. OBJECTIVES OF MANAGEMENT

3.1 GENERAL OBJECTIVES FOR NATIONAL PARKS

The following general objectives relate to the management of national parks in NSW:

- * protection and preservation of scenic and natural features;
- * conservation of wildlife;
- * maintenance of natural processes as far as is possible;
- * preservation of Aboriginal sites and historic features;
- * provision of appropriate recreation opportunities to foster enjoyment and appreciation of national parks; and
- * encouragement of scientific and educational inquiry into environmental features and processes, prehistoric and historic features and park use patterns.

3.2 SPECIFIC OBJECTIVES FOR SYDNEY HARBOUR NATIONAL PARK

In addition to the above objectives, the following specific objectives apply in the management of Sydney Harbour National Park:

- * management of the park as part of a system of lands which protect the natural and cultural heritage and scenic amenity of Sydney Harbour;
- * restoration and interpretation of the significant natural values of the park;
- * conservation of historic structures and their settings;
- * interpretation of a range of historic places which illustrate important aspects of Australia's history, including:
 - the defence of Sydney and New South Wales;
 - immigration and quarantine;
 - the maritime history of Sydney Harbour; and
 - the history of public recreation on the harbour and its foreshores;
- * provision of outdoor recreation opportunities which are compatible with the protection of the natural and cultural values of the park and complement those available elsewhere in the centre of Sydney; and

- * promotion of the park as an important, readily accessible recreational and educational resource for metropolitan Sydney.

3.3 OVERALL STRATEGY

The overall strategy for Sydney Harbour National Park is the protection and where necessary restoration of the park's natural vegetation, and the maintenance and adaptive re-use of important historic places. High standard visitor facilities will be provided to cater for public use. Private sector involvement will be encouraged where appropriate to provide opportunities for public use and the conservation of structures and natural qualities of the park.

In all sections of Sydney Harbour National Park the protection of the existing natural and cultural values will be given priority. In addition, emphasis will be given to the following strategies in each precinct:

- North Head:**
 - interpretation of the natural values
 - interpretation and use of the Quarantine Station
 - improved walking and bus access
- Dobroyd Head:**
 - rehabilitation and interpretation of the natural vegetation
 - upgrading of walking access
 - interpretation of the Crater Cove huts
- Middle/Georges Head:**
 - interpretation of fortifications and defence history
 - rehabilitation of the natural vegetation
- Bradleys Head:**
 - rehabilitation of the natural vegetation
 - upgrading of walking access
 - use of Athol Hall
 - interpretation of cultural heritage
- Nielsen Park:**
 - rehabilitation of natural vegetation
 - interpretation of cultural values
 - upgrading of visitor facilities
- South Head/Gap Bluff:**
 - rehabilitation of natural vegetation
 - upgrading of walking access
 - interpretation of cultural values
- Clark, Shark and Rodd Islands:**
 - interpretation of cultural values
 - increased public access
 - maintenance of the distinctive character of each island
- Goat Island:**
 - encouragement of public and commercial use of the buildings which will promote their conservation and interpretation

4. FRAMEWORK AND POLICIES FOR MANAGEMENT

This section contains the framework and policies for management of Sydney Harbour National Park, together with relevant background information. Policies are summarised under the following headings:

- The Park Environment: Its Natural and Cultural Heritage; and
- Use of the Park.

The policies established in this plan of management will provide the framework for management consistent with anticipated resources available to the Service and anticipated community trends for the next five to ten years. Management will also be in accordance with the Service's Field Management Policies which are not repeated in the plan.

The actions identified in the plan are those immediate proposals which are to be undertaken in the next five years. Other management actions may be developed over the life of this plan consistent with the policies set out in the plan.

4.1 THE PARK ENVIRONMENT: ITS NATURAL AND CULTURAL HERITAGE

4.1.1 Landscape

Sydney Harbour formed about 6,000 years ago when the sea rose to its present level, drowning the Parramatta River valley. The Hawkesbury sandstone terrain of steep hills, long narrow ridges, deep rocky valleys and intricately eroded cliffs typifies the landscape in the park. Older Narrabeen series formations can be seen at the base of North Head, while the central ridge of North Head consists of aeolian sand dunes overlaying sandstone. Remains of basalt dykes which intruded through the sedimentary rocks are visible at Bottle and Glass, Bradleys Head and North Head.

Most of the soils in Sydney Harbour National Park are highly erodible, shallow, stony, infertile quartz sands derived from Hawkesbury sandstones. On the plateaus where drainage is impeded, the soils are poorly drained and organic matter accumulates to produce dark peaty soils. On the sides of ridges and hills clayey subsoils develop. The soils are phosphorus deficient and hence an increase in nutrients from urban runoff has detrimental impacts on the native vegetation which is adapted to low nutrient levels and encourages weed invasion. To help prevent further weed incursions nutrient rich soil or fill will not be introduced into natural areas.

Generally the park is located down-slope of urban areas and is consequently affected by nutrient-high runoff. Of particular concern are areas where stormwater has been directed into the park, resulting in gulying, siltation, pollution and the introduction of weeds. Negotiations with local councils have resulted in some stormwater being redirected into stormwater drains, but in other areas this is still a problem.

The cliffs and beaches within the park, with their vegetation of heath, scrub and woodland, provide a contrast to the grassed picnic areas and surrounding urban and industrial areas. Much of the vegetation is regrowth which has followed the cessation of defence activities, while other areas are dominated by cultural plantings. Both the native vegetation and major cultural plantings are now an important part of the park landscape.

Historic structures are important parts of the landscape. Fortifications, monuments, navigational aids, and buildings are visible from both the land and the water. Their form and scale provides a contrast to the natural environment and the other built elements around the harbour.

Large areas of the foreshore areas have been modified by landscape reclamation and the construction of seawalls. Many of the seawalls in the park are now old and subject to erosion. Seawall repair and restoration is required in a number of areas to prevent foreshore erosion.

Regional Environmental Plan No. 23 Sydney and Middle Harbours, contains guidelines to enhance the scenic value of the harbour foreshores. It recommends the natural foreshores be left undisturbed, and that introduced plants be removed and replaced with locally indigenous plants except in cultural landscapes.

Places of high scenic/landscape value listed in the Regional Environmental Plan include Greycliffe House and its grounds; the northern rocky and southern grassed headlands of Camp Cove; the mast of HMAS Sydney; the sandstone column, stone wharf, rocks and vegetation on Bradleys Head; the flagstaff on Cannae Point at the Quarantine Station; the Quarantine Station buildings set amongst indigenous and exotic vegetation; the natural landscape of cliffs and heathland on North Head; and all existing well-vegetated areas.

The Sydney and Middle Harbours Regional Environmental Plan recommends that skylines which are vegetated be maintained free of built elements and that intrusive visual elements should be screened or removed. The radio masts on Middle Head are one element identified in the regional plan for removal. One radio mast is currently used by the Police Department for public safety purposes and will remain. The remainder will be assessed for historic significance and removed if not found worthy of preservation. The masts will not be used by other than the police as there is concern that any other use of the masts could interfere with police operations.

A comparatively recent addition to the foreshore landscape is the metal sign (HMAS Sydney) which is on a rock face on the headland at Bradleys Head. This sign detracts from the visual amenity of the headland, and from the other cultural features such as the mast itself and the historic fortifications on which it stands. All existing signs and other structures will be reviewed to minimise their impact on rock faces within the park.

The Islands Regional Environmental Study notes that the islands in the park are also important visual and landscape features of the harbour, each with its own distinctive character which should be conserved.

Policies

- * The landscape and scenic qualities of the park will be conserved.
- * The naturally-vegetated areas of the park and significant cultural landscapes will be maintained.
- * Areas subject to non-natural erosion and instability will be rehabilitated.
- * All construction works carried out within the park will incorporate soil erosion and sedimentation control principles and practices developed by the Department of Land and Water Conservation.
- * No new developments will be permitted which are likely to impair the scenic viewsapes or the natural skyline within the park when viewed from either the water or the land.
- * Rock faces will be protected. Cuts into rock and other structural works will be minimised.
- * Erosion control and rehabilitation work will be progressively undertaken on eroded sections of roads, tracks and sea walls.
- * Where practicable Hawkesbury sandstone or its derivatives will be used in any walking track construction, erosion control or landform stabilisation work in the park.
- * Visitor and management structures which detract from the scenic values of the park will be screened by planting.
- * Only the police will be permitted to use the radio masts on Middle Head.
- * Locally indigenous species will be used for screen and other planting, except where this will adversely impact on cultural values.
- * The co-operation of adjoining councils, military bases and other neighbours will be sought to direct run-off away from the park, to reduce impacts of pollution and/or to install silt traps or energy dissipaters where necessary.

Actions

- * Erosion control and rehabilitation work will be undertaken on eroded sections of Bluefish Drive, the main Bradleys Head walking track, the old track to the Bradleys Head wharf, Cobblers Beach Road, those parts of the Manly Scenic

Walkway within the park, and on the seawalls around the islands, Hermit Point and Bradleys Head.

- * Planting will be undertaken to screen the toilet block near Lady Bay from the water.
- * Existing signs and other structures will be reviewed to minimise visual impact.
- * The radio masts on Middle Head, except those required by the Police Department for public safety purposes or assessed as having historical significance, will be removed.

4.1.2 Aboriginal Heritage

European settlement was devastating to the Aboriginal people living around the harbour and nearby areas: the Eora, Guringai and Daruk speaking people. Land was cleared for camps, then the construction of towns, and forests were cut down to provide fuel and building materials. Aboriginal people lost access to their camping and food gathering areas and were forced into the territory of neighbouring groups. In the first decade of European settlement there were at least two serious outbreaks of disease which decimated the Aboriginal population. By the middle of the nineteenth century dispossession of Aboriginal people from the growing Sydney area was virtually complete.

Today much of the evidence of the traditional way of life of the Eora or Guringai people in Sydney has been removed by the development of the city. In the early years of the colony shell midden deposits, which lined the foreshores and estuaries of the harbour, were dug up and burned for lime; scarred trees, where bark and wood were removed for implements, are almost unknown in the region today; sandstone shelters where people sometimes lived and painted, and sandstone platforms where they engraved their tools and weapons, ancestral figures and the animals which they hunted have also largely been destroyed by the suburban and industrial spread.

Aboriginal sites have survived mostly on land which was reserved for defence purposes, was too difficult to develop, or was reserved for recreation. About 70 Aboriginal sites have been recorded in the park, although it has not been systematically surveyed and unrecorded sites may exist. Habitation or occupation sites include shelters with shell midden deposit, some also with burials, and open middens. Art sites include engravings of marine animals, such as fish, sharks and whales; land animals, such as people, kangaroos and emus; one contact motif (a sailing ship at Shark Point); tools, such as shields; and shelter art sites, most with ochre hand stencils. Axe grinding grooves are found in many places around the harbour foreshores and along creek lines.

Although the Aboriginal sites in the park have been partly protected because they were on land which was never intensively developed, the condition of the majority is poor. Many have been adversely impacted by tracks, fences, erosion, defence installations, early archaeological or antiquarian investigations, storm wave action and vandalism. Because their environmental context and association with a range of sites across a landscape has been destroyed, the sites in the park are generally of limited scientific value.

The Aboriginal sites and places in the park are significant to local Aboriginal people, both as evidence of the traditional way of life of the original occupants, for the education of their children and the wider public. The Service has the legislative responsibility for the conservation and management of Aboriginal sites, but its policies recognise that Aboriginal people have the right to make decisions about Aboriginal heritage management and the presentation of information about Aboriginal culture and history. The Metropolitan Local Aboriginal Land Council, based in Alexandria, is the land council which covers Sydney Harbour National Park.

Policies

- * Aboriginal sites in the park will be conserved and managed in consultation with the local Aboriginal communities.
- * Any work with the potential to impact on Aboriginal sites will be preceded by an archaeological assessment. Works will be modified as necessary to avoid impacting on Aboriginal sites in the park.
- * Access to Aboriginal sites will only be promoted if the sites can be adequately protected from damage.
- * Research into the Aboriginal heritage of the park and recording of Aboriginal sites will be encouraged.
- * Interpretation of the Aboriginal history of the park will be undertaken in conjunction with Aboriginal people.

Action

- * A program for regular monitoring of the condition of Aboriginal sites will be prepared and implemented, with priority given to those sites in close proximity to visitor facilities. Protective measures will be undertaken if it is found that damage is occurring.

4.1.3 Historic Heritage

Initial European settlement in Australia centred on Sydney Harbour and Sydney Harbour National Park contains a large number of places associated with substantive aspects of the development of Sydney and Australia. These include the

role and contribution of convicts; the development of systems of fortifications to protect the colony; navigation and maritime industry on Sydney Harbour, pivotal to the economy of New South Wales in the nineteenth and early-middle twentieth centuries; and immigration and quarantine, essential for providing a healthy labour force and market for the products of the state. Places in the park also demonstrate the development of recreational use of the harbour and its foreshores.

The Convict and Early Colonial Era

In 1831 convicts, who had been housed in hulks on Sydney Harbour, were relocated to Goat Island to work a sandstone quarry on the eastern point of the island. In 1833 convict labour was used to quarry and level a section of the western side of the island for buildings proposed for the storage and handling of explosives. Work on the Queens Magazine and associated buildings, including a cooperage to the north, commenced in 1836 and was completed by 1839. Convicts also built the barracks and a kitchen building south of the magazine (completed by 1838) and quarried a channel through the eastern tip of the island to effectively create a separate island where a Water Police station was later built. The conservation plan for Goat Island emphasises the importance of the island as a record of the early days of the colony and a valuable interpretive site. The Queens Magazine is considered one of the finest and earliest large stone powder magazines built in Australia.

Defence

The first fortification away from the small developing township of Sydney was built during the Napoleonic wars when there was a fear of invasion by the French. In 1801-1802 a battery was cut into the rock at Georges Head to protect the entrance to the harbour. The curved sandstone parapet still exists and is one of the oldest European structures in Australia.

In 1836 George Barney, Royal Engineer, reviewed harbour defences and reported on serious inadequacies. He recommended a number of improvements but the changes he proposed were not implemented until the undetected arrival of four American warships in the harbour in 1839 led to public fears about the vulnerability of Sydney. Between 1839 and 1841 Barney's plans for construction of a battery on Pinchgut, a small rocky island at the entrance to Sydney Cove, and a battery on Bradleys Head were partially implemented using convict labour.

Concern regarding possible threats from the Russian Pacific fleet in 1853 resulted in the temporary installation of guns at Middle Head and Laings Point, while work also commenced on batteries at South and Middle Head. A circular parapet was added to the Bradleys Head fortifications and by 1857 Fort Denison on Pinchgut was completed, including construction of the martello tower which is one of only two in the southern hemisphere and one of the finest examples of its kind in the world.

In 1870 most of the British troops garrisoned in Sydney were withdrawn. Harbour headlands were resumed for defence purposes and another round of construction and upgrading of fortifications commenced, with work at Bradleys Head, Shark

Point, Georges, Middle and South Heads. The cobble stone roads to Middle, Georges and South Heads; the defensive ditches at Bradleys and Middle Head; the three brick beehive casemates at Georges Head; and the gun emplacements, three cannons and rifle wall at Bradleys Head are important evidence surviving from this period. The original timber gun carriage and slide at Bradleys Head is also a significant element dating from this period.

Harbour fortifications were upgraded again in the late 1800s, including underwater mining of the harbour between Georges Head and Laings Point, an armoured casemate on Georges Head and the addition of increasingly powerful guns in modified or newly built emplacements. The final upgrades of the harbour fortifications occurred during the lead up to and early years of World War II, as part of a co-ordinated system for the defence of the coast from enemy raiders. Concrete command posts, range-finding stations, gun emplacements and observation posts were constructed during this period.

Developments in military technology, such as missiles and tactical nuclear weapons, meant that coastal armaments became obsolete and in the 1960s Australia's coastal artillery was decommissioned. There was a brief revival of military use of the forts at Middle Head in the 1960's when officers, scheduled to serve with the army in South Vietnam, were trained to withstand torture. There are corrugated iron "tiger" cages and a water tank in the engine room at Middle Head remaining from this use.

The fortifications on Middle and Georges Head, Bradleys Head and Fort Denison are of national significance because they are the most diverse collection of fortifications and defence sites in Australia, illustrate continuing concern with the defence of Sydney and training of military forces from the early 1800s until the 1960s, and contain a number of unique or rare structures. They are particularly valuable for interpretation of Australia's defence history. Many of the other remaining buildings, structures and places are of regional or local significance, including the School of Gunnery officers mess at Gap Bluff which was built in 1936 and is one of the few military buildings constructed in the *modern* or *ocean liner* style.

Navigation and Maritime Industry

In addition to defence, the colonial government had to provide facilities and services for the safe and efficient functioning of the harbour. Navigational aids were erected on many of the prominent points around the harbour. Early surviving examples include an obelisk south of the Quarantine Station built in 1807; two obelisks at Obelisk Bay and one on Laings Point constructed in 1857-58; nineteenth century wooden markers near the Quarantine Station; and the Grotto Point lighthouse built in 1911. In 1871 one of the sandstone columns from the facade of the Sydney GPO was relocated to Bradleys Head to mark one nautical mile from Fort Denison over which the speed of vessels was measured.

A water police station was built on the north eastern point of Goat Island around 1839 and another station was established in the late 1830's at Camp Cove. Only

the building on Goat Island, designed by the Colonial Architect Mortimer Lewis in 1838, and the slipway and wharf from the Camp Cove station still remain.

In the early 1900s Goat Island became the centre of operations for the newly-created Sydney Harbour Trust. The island was the base for harbour management first under the Trust, then after 1936 the Maritime Services Board. A residence for the Harbour Master, a shipyard used for construction and repair of small boats, navigation markers, a base for firefighting on the harbour and workshops were constructed on the island and are important evidence of different phases in the management of Sydney Harbour.

Quarantine and Health

Spring Cove, on the western side of North Head, was first used in 1828 to quarantine people who arrived in the colony with communicable diseases such as smallpox. A permanent quarantine facility was established at North Head in the 1830's and it continued to be used for this purpose until 1972. Most of the surviving buildings, including first and second class accommodation, hospital buildings, laundry and fumigation shed were built in the 1880s. The third class dining room, administration block, isolation wards, morgue, disinfection block and shower block were constructed between 1911 and 1916. Over 2000 inscriptions were carved into the rocks around the Quarantine Station by quarantined passengers and crews.

The Quarantine Station is nationally significant because it is the oldest, largest and most intact human quarantine facility in Australia. It has social significance, symbolising the distance travelled by immigrants and the hazards they faced. The station demonstrates how immigration, social and racial attitudes, and medical, quarantining and building practices changed in Australia over 150 years.

Some of the harbour islands and Bradleys Head were used for animal quarantine and research. Between 1888 and 1894 Rodd Island was used as a research station for rabbit eradication experiments by the Pasteur Institute. In 1891 Rodd Island was also declared a quarantine station for imported stock, to supplement animal quarantine stations on Bradleys Head and Shark Island. In the early 1900s a bacteriological research facility was established on Goat Island in response to plague outbreaks in Sydney. The hall on Rodd Island is believed to have originally been a residence associated with the research station. No other physical evidence of the Bradleys Head or island quarantine and research operations has been found.

Recreational Use of the Harbour

In 1879 Rodd, Clark and Shark Islands were dedicated as the first public recreation reserves on the harbour, though Rodd and Clark Islands had periods of use for quarantine from around 1888 to the early 1890s. Most of the grottos, pavilions and paths on the islands were constructed around 1900-1920 when the areas were managed by local trusts. The house on Rodd Island was converted into a dance hall early in this period.

In the 1860's a number of private pleasure grounds and dance halls were established on the northern side of the harbour in response to tight liquor licencing regulations in the colony but by the late 19th/early 20th century dance halls were considered fairly unsavoury and their popularity declined. In 1905 the Harbour Foreshores Vigilance Committee was established and began to lobby for the return of harbour foreshore land to the public domain. Bradleys Head, including Athol Gardens, was resumed by the State Government in 1908 and the Ashton Park Trust was established to administer the land. At this time the Athol Gardens Family Hotel was largely demolished and Athol Hall was constructed, possibly incorporating parts of the old hotel building. The stone shed and some paths and plantings near Athol Hall may date from this period.

In 1911 land at Vaucluse and Dobroyd Head was also resumed for public recreation and placed under the management of local trusts. In the succeeding years Nielsen Park was intensively developed for public recreation. The kiosk at Nielsen Park was built in 1914 and stone dressing sheds were built at either end of Shark Beach in the early 1920s. Paths were constructed through the bush on Mount Trefle during the 1920s. A shark net was erected at the beach in January 1930 and the bathing pavilion behind the dunes was opened in 1932, with a tunnel under the promenade to the beach where patrons paid an entry fee. The Halbert Pavilion is the most recently constructed and only remaining open picnic shelter in Nielsen Park. The existing structure will be returned to a condition close to its original function and structure.

In the 1920s and 1930s a number of huts were built north of the harbour at Reef Beach, North Head and Crater Cove. Seven huts, dating from between 1923 and 1963, survive at Crater Cove. They were largely built of "found materials" and used for holiday and weekender accommodation, and as artists retreats and club houses. Following incorporation of Crater Cove in the national park, private occupation of the huts was considered inappropriate given the public nature of the land and the lack of sewerage facilities.

Management of Historic Heritage

The Service has adopted the Burra Charter as the basis for management of historic sites. The Burra Charter was developed by Australia ICOMOS (International Committee on Monuments and Sites) to guide conservation of places of cultural significance. Conservation is based on respect for the existing fabric and setting of a place, and involves the least possible intervention. Conservation processes which may be implemented for a place include preservation, restoration, reconstruction and adaption for compatible re-use.

Sydney Harbour National park has a substantial number of buildings and other structures that require maintenance and which are not needed solely for management or related purposes. These buildings also provide opportunities for Sydney Harbour National Park to be appreciated and enjoyed. Various public and commercial uses of historic buildings within Sydney Harbour National Park, compatible with their heritage values are being investigated. The use of buildings would assist in:

- interpretation of the structure and its history;
- maintenance of the fabric;
- promoting appreciation of Sydney Harbour and the national park; and
- minimise the need to build new structures in the park.

It is proposed that new uses of buildings within Sydney Harbour National Park consistent with its objectives of management will occur. These will be subject to an occupation agreement under the National Parks and Wildlife Act.

Conservation plans have been prepared for a number of historic places in Sydney Harbour National Park, including the Quarantine Station, Goat Island, Fort Denison, Crater Cove, Ashton Park and Athol Hall, the HMAS Sydney mast at Bradleys Head, the Officers Mess and surrounding lands at Gap Bluff, and the Middle Head and Georges Head fortifications. Heritage studies, including historical research, have been undertaken of the lightkeepers cottages at South Head, Nielsen Park landscape, the water police station on Goat Island and fortifications elsewhere in the park.

No systematic inventory of the park's historic heritage has been attempted, partly because of the magnitude of the task and partly because the preparation of conservation plans for major places has taken priority. In the absence of funds to preserve all historic places in the park and adequate knowledge of the range and significance of places, the Service has adopted a strategy of trying to stabilise structures, rather than channelling limited resources into restoration of a smaller number of major places while allowing the remainder to deteriorate. This has been adopted as the course of action which will retain the greatest number of options and historic places in the short to medium term. At the same time the Service has adapted a number of places for park management operations. Greycliffe House is used as the District office; the Officers Mess at Gap Bluff is occupied by the Foundation for National Parks and Wildlife; buildings on Goat Island and in the Quarantine Station serve as sub-district offices and tour centres; and many of the cottages provide accommodation for park staff to ensure after hours security.

Goat Island is to be managed in accordance with the conservation plan noted above which has been prepared and placed on public exhibition. A concept plan has subsequently been prepared which proposes that the adaptation of the harbour masters house and the adjacent cottages for a restaurant/cafe/ guest house will be investigated. Additional buildings may be constructed behind the harbour masters house to provide visitor accommodation as part of the guest house proposal. Any proposals for the use of the existing structures and the construction of new buildings will ensure protection of the scenic amenity of Goat Island when viewed from the harbour and any such proposals will be placed on public exhibition as an amendment to this plan.

Leasing of buildings is also being investigated. Expressions of interest for leasing the Quarantine Station and Athol Hall have been sought, for uses which are in accordance with the conservation plans for these buildings. Opportunities for the use of Fort Denison and Goat Island under lease are also high priorities for investigation. Any commercial facilities approved will enhance the public use and not become the main focus of the park and the integrity of the park and public access will be maintained.'

Since 1990 the huts at Crater Cove have been maintained by a local caretaker group in accordance with conservation guidelines prepared by the Service. The Service will explore options for the recruitment of volunteers to assist with the caretaking of other historic places within the park.

Many of the historic places in Sydney Harbour National Park are in high visitor use areas where there is little existing information about the place. Guided tours will continue to be undertaken of some sites while at other sites interpretive signs will be erected to explain to park visitors the history of the area. The Service does not propose to use historic buildings for private use. Adaptive re-use will be undertaken to optimise public access. The private sector may be involved in this process.

Policies

- * The historic heritage of the park will be conserved in accordance with the principles of the Burra Charter of Australia ICOMOS.
- * The primary criteria for determining priorities for the preservation of historic heritage will be cultural significance and threat. Priorities for restoration, reconstruction and adaption will then be determined on the basis of the feasibility of providing for public access for interpretation and other use, including commercial use to generate revenue for its conservation.
- * Cyclical maintenance schedules for historic places will progressively be prepared and implemented, with priority given to places of high (or potentially high) cultural significance and places promoted for public access.
- * Subject to protection of cultural values and public safety, public access to historic places in the park will be encouraged.
- * Conservation assessments, including where necessary the preparation of a conservation plan, will precede:
 - any works on a historic place, other than routine maintenance or urgent stabilisation work;
 - any proposal to substantially modify an existing use or to introduce a new use to a place; and
 - any proposal to restore to a natural condition or otherwise modify a landscape containing cultural features and/or plantings.

- * Recent developments which impact on historic values will be removed, and new developments which will adversely impact on historic places will not be permitted.
- * Work with the potential to impact on subsurface archaeological evidence will be preceded by an archaeological assessment and recording.
- * Portable objects will be conserved and interpreted *in situ* wherever possible. If portable objects need to be removed from sites to allow essential conservation works to be undertaken and/or to ensure their survival, they will be fully documented before they are removed.
- * Artefacts which do not have an association with a place will not be introduced for the purposes of interpretation.
- * Special museum environments to conserve artefacts will not be established unless demonstrated to be both necessary and not a financial burden on the Service.
- * The historic heritage of the park will be interpreted, with emphasis on the themes of quarantine, defence, maritime industry and recreation.
- * An assessment will be undertaken of the cultural significance of the introduced plantings in Sydney Harbour National Park. Culturally significant plantings identified through the conservation planning process will be replaced by plants of the same species when they become senescent or die unless they are having an unacceptable impact on the park's natural values. Significant plants which impact on the park's natural values will be replaced with visually similar indigenous species.
- * Vegetation which is damaging historic structures and features will be removed.
- * The development of volunteer or caretaker programs to assist in the management, promotion and interpretation of historic places on Sydney Harbour National Park will be encouraged.
- * Research into the historic heritage of the park will be encouraged. Priorities for such research will be determined in conjunction with specialists and research institutions.

Actions

General

- * The historic place register for Sydney Harbour National Park will be upgraded, and additional data such as site records, landscape plans, survey reports, condition reports, conservation plans, management guidelines, maintenance schedules and records of work undertaken on historic structures and portable objects recorded on the register.
- * Interpretive signs will be erected near selected historic features in high visitor use areas. Priority will be given to the fortifications on Middle Head and Bradleys Head, Greycliffe House and the gardeners cottage at Nielsen Park, the head lighthouse keepers cottage on South Head, and the Crater Cove huts.

North Head

- * Conservation guidelines will be prepared for the historic stone walls on North Head and the engravings within the Quarantine Station.
- * Tenders will be sought for the leasing of the Quarantine Station for uses which are consistent with the National Parks and Wildlife Act, the conservation plan for the whole complex, and are generally consistent with the existing patterns of public use. This may include use of the area for public accommodation, conferences and/or a function centre.
- * The Service will continue to be responsible for interpretation programs at North Head and will investigate the future use of buildings in the Quarantine Station for this purpose.
- * No new buildings will be constructed within the Quarantine Station unless they are reconstructions of former buildings or are outside the historic precinct. Any proposal which involves the construction of new buildings will be subject to an environmental impact statement which will be publicly exhibited.

Dobroyd Head

- * Management guidelines will be prepared to guide maintenance of the Crater Cove huts and surrounding landscape.
- * At least one of the Crater Cove huts will be made available for public inspection under the supervision of caretakers or guides.

Middle/Georges Head

- * A maintenance schedule will be prepared and implemented for the 1801 Battery, Outer Middle Head Battery, Inner Middle Head battery, Nordenfeldt gun emplacement, battery commanders station/electric light station.

- * The condition of the fortifications at Middle Head and Georges Head will be monitored. If damage is caused by visitor access or vandalism, or if areas are identified as unsafe, parts of the forts complex will be gated to prevent unsupervised access.
- * The excavation of the defensive ditch at Middle Head to improve interpretation of the site will be investigated.
- * The beehive casemates at Georges Head will be stabilised and gated. Access to the beehive casemates will be by guided tours only.

Bradleys Head

- * Athol Hall will be adapted for use as a cafe and hall. Minor alterations will be permitted to the building, including integration of the hall and caretakers residence and construction of a kitchen/store/toilet component midway along the eastern elevation.
- * The modern carport and clothes line behind Athol Hall and the slippery dip in the amphitheatre are inconsistent with the historic setting and will be removed.
- * The pathways, amphitheatre and stone retaining walls associated with Athol Hall will be restored.
- * Vulnerable or dangerous fortifications will be gated to prevent access.
- * The timber gun carriage and slide at Bradleys Head will be conserved *in situ*, unless a secure, climate-controlled storage place can be obtained, in which case they will be removed, treated and stored out of the weather to slow further deterioration. A replica of the gun carriage and slide will replace the original if it is removed.

Nielsen Park

- * A landscape management plan will be prepared and implemented for Nielsen Park. This will include clearing and thinning of some of the plantings around Greycliffe House to re-establish the historic connection between the house and the harbour.
- * The Halbert Pavilion will be returned to a condition close to its original function and structure.

South Head

- * The lightkeepers cottages on South Head have been stabilised and options for their future use, and for use of the Constables Cottage at Camp Cove and the house on Laings Point, will be investigated. Any proposals for use of the buildings will be placed on public exhibition.

Goat Island

- * The water police station will be restored and will be the focus to interpret the history of water police operations on the island. The recent timber additions to the building may be removed.
- * The barracks and magazine buildings will be the focus to interpret the history of the island. Interpretive sound and light shows and other functions may be held in the buildings and their courtyards.
- * The adaption of the harbour masters house and the adjacent cottages for a restaurant/cafe/guest house will be investigated. Additional buildings may be constructed behind the harbour masters house to provide visitor accommodation as part of the guest house.
- * The shipyard will be leased for re-use as an operating shipyard.
- * The amenities blocks in the magazine precinct will be removed if they are not required for the management or administration of the island or the shipyard.
- * Any proposals for the use of the existing structures and the construction of new buildings will ensure protection of the scenic amenity of Goat Island when viewed from the harbour.
- * Any proposals for the use of the buildings and the construction of new buildings will be placed on public exhibition as an amendment to this plan.

Fort Denison

- * Interpretive facilities will be provided to permit self-guided tours of Fort Denison, except for the martello tower to which access will be by guided tours only.
- * A section of the barracks will be adapted and leased for use as a kiosk/cafe and/or function area.
- * The garden beds, except for that containing the Canary Islands palm, and the barbecue are considered to have no cultural significance and will be removed.
- * For special events, a marquee may be erected in the forecourt for the period of the special event only but not as a regular or permanent fixture.
- * The marquee will be designed to minimise visual impact upon the appearance of the fort when viewed from Sydney Harbour.

Clark, Shark and Rodd Islands

- * The hall on Rodd Island has been stabilised and will be maintained as a picnic shelter and/or function hall.
- * The grottos and paths on the islands will be assessed, and stabilised where necessary.

4.1.4 Native and Introduced Plants

The vegetation of Sydney Harbour National Park is an important remnant of that which once covered much of the coast around Sydney. The structure of the vegetation varies from coastal heath on the poorly-drained very shallow soils, to woodland on exposed ridges and slopes, to forests in gullies. Heathlands make up approximately 40% of the park, forests 15%, woodlands 25%, and approximately 20% has been cleared or modified.

Five rare plant species have been recorded in the park: *Eucalyptus camfieldii* (a stringybark) is found on the Quaternary dunes at North Head; the wet heath groundcover *Rulingia hermanniifolia* is found along the cliffs of North Head, Middle Head and around Crater Cove; *Gonocarpus salsoloides* occurs in the wet heathland on North Head; and *Allocasuarina portuenis* was recently found on the Hermitage Foreshores. In addition the regionally-rare ground orchid *Erythrorchis cassythoides* is found at its southern limit on North Head.

North Head also has a number of communities which are considered of high significance and vulnerable. These are the broad-leaved paperbark (*Melaleuca quinquenervia*) forest, dry, smooth barked apple (*Angophora costata*) forest, tea tree (*Leptospermum laevigatum*) scrub, wet *Sprengelia* heath and the swamp oak (*Casuarina glauca*) scrub. Parts of North Head have not been burnt for more than 30 years and tea tree scrub is being replaced by sweet pittosporum (*Pittosporum undulatum*). The area near the lookouts, which was severely eroded, was substantially revegetated with local species in the early 1980s.

Dobroyd Head has similar *Banksia ericifolia/Allocasuarina distyla* heath vegetation to North Head, however it is not as mature as it has been burnt approximately every 10 years.

The dominant species on Middle Head is sweet pittosporum. Lack of fire on Middle Head has resulted in the development of a mature scrub and bangalay (*Eucalyptus botryoides*) woodland on the north-east slopes. Bradleys Head generally supports an open forest of Sydney peppermint (*Eucalyptus piperita*), red bloodwood (*E. gummifera*), bangalay (*E. botryoides*) and smooth barked apple, although a closed forest is found in the moister gullies, such as at Taylors Bay.

Much of Nielsen Park, the Hermitage Foreshore and South Head was cleared and planted with introduced species. Remnants of the original vegetation include Port Jackson figs (*Ficus rubiginosa*), tick bush (*Kunzea ambigua*) and tea tree (*Melaleuca*

nodosa) on the summit of Bottle and Glass Point. The regrowth vegetation of red bloodwood, smooth-barked apple, sweet pittosporum, occasional Port Jackson figs and tall heath found on Mount Trefle is considered to be very important as it is the largest area of natural bush on the southern side of the harbour. The significance of this area was increased by the relatively recent discovery of a few plants of a new species, *Allocasuarina portuensis*, found only on the western foreshore slopes of Nielsen Park. The islands were also largely cleared although important regrowth vegetation is found on Goat, Clark and Shark Islands.

Dieback is presently occurring in the park on Bradleys Head, Georges Head and North Head. Although some research has been undertaken, it is still unknown whether the dieback is due to a reduction in the bird species which eat insects affecting the trees, pollution, changed drainage patterns, or the long period since these areas were burnt by hot fires.

Introduced plants, some of which have cultural significance, are found on the park in association with many of the historic sites. Some of these plants, however are spreading into the bushland, including coral trees (*Erythrina syksii*), oleanders (*Nerium oleander*), yucca (*Agave* sp), Canary Island palms (*Phoenix canariensis*) and New Zealand Christmas bush (*Metrosideros excelsa*).

There are also a large number of introduced plants in the park which have spread from neighbouring gardens, garden refuse dumped in the park, or carried in by wind or birds. These include lantana (*Lantana camera*), crofton weed (*Ageratina adenophora*), morning glory (*Convolvulus arvensis*), bitou bush (*Chrysanthemoides monilifera*), pampas grass (*Cortaderia selloana*), asparagus fern (*Asparagus sprengeri*), privet (*Ligustrum* sp.), camphor laurel (*Cinnamomum camphora*), alligator weed (*Alternanthera philoxeroides*), blackberry (*Rubus fruticosus*) and pellitory (*Parietaria judaica*). Twenty-five weeds listed as noxious for the Sydney area under the Noxious Weeds Act 1993 have been found in the park. Lantana, asparagus fern and morning glory are widespread within the park, while others occur in isolated patches. Most occur in patches throughout the park, however alligator weed occurs only at Collins Flat and in two patches along the Hermitage Foreshore and bitou bush only occurs on North and South Heads.

The highest concentrations of weed species are found on the perimeters of the park. The Sydney and Middle Harbours Heritage Study noted the need for improved weed control to protect the native vegetation on Dobroyd Head, Bradleys Head and at Store Beach on North Head. South Head, Gap Bluff and the Hermitage Foreshore also need extensive bush regeneration work as little of the native vegetation remains.

The District is currently trialing volunteer bush regeneration programs to assist with the control of weeds and revegetation of degraded areas within the park. Where replanting is required, preference will be given to the use of plants propagated from seed from that area.

Policies

- * Revegetation and regeneration of the native vegetation of Sydney Harbour National Park will be undertaken except within significant cultural landscapes.
- * Rare, vulnerable and endangered plant species found in the park will be protected from disturbance and managed to maximise their long term conservation.
- * New developments will not be located in areas where they may adversely impact on rare or sensitive vegetation communities.
- * Revegetation programs will use only local native plant species and, where possible, material propagated from the area being revegetated.
- * Introduced plants that are not of historical importance will be controlled and where possible eliminated.
- * Areas currently free of weeds will be monitored to ensure that they remain weed-free.
- * Priority for the control of introduced plants will be given to those which:
 - are declared noxious weeds under the Noxious Weeds Act;
 - are new or isolated occurrences;
 - are damaging to cultural heritage values;
 - conflict with significant natural values;
 - have a high capacity for dispersal or spread; and
 - are in areas of high public use.
- * The co-operation of local councils, park neighbours and volunteers will be sought in implementing weed control and bush regeneration programs.
- * Research into the management of rare and endangered plant species and causes of the dieback occurring on the park will be encouraged.

Actions

- * Guidelines will be prepared for the management of the rare plants on the park, with priority given to *Allocasuarina portuensis*.
- * A comprehensive survey of the flora of the park will be undertaken.
- * A list of priority research projects related to native plants will be prepared.
- * A public education program will be conducted to encourage park neighbours to plant only locally indigenous species on fire breaks and to raise community awareness of the impact and causes of the spread of weeds.
- * Signs will be erected along the Hermitage Foreshore walk to interpret the impacts of urbanisation on the natural bushland.

- * A weed control program will be prepared and implemented. Priority will be given to the removal and replacement with locally indigenous species of:
 - isolated introduced plants which have spread into bushland areas;
 - lantana, coral trees, pellitory and fig suckers affecting historic buildings and structures;
 - alligator weed at Collins Flat and along the Hermitage Foreshore; and
 - lantana, pampas grass, coral trees, oleanders, asparagus fern, morning glory, crofton weed, castor oil plant, blackberry, bitou bush, privet and camphor laurel on North Head, Dobroyd Head, Bradleys Head, Bottle and Glass, Mount Trefle, South Head, the islands and along the Manly Scenic Walkway.

- * The expansion of the volunteer bush regeneration program in the park will be encouraged.

4.1.5 Native and Introduced Animals

A combination of increasing urbanisation, the segregation of the bushland into isolated pockets around the harbour foreshore and introduced predators has led to the disappearance of many of the native animals, particularly mammals, from around Sydney Harbour. Those animals which have survived in the park, such as possums, have either adapted to the urban environment, or can escape predators like the birds and reptiles. Brushtail possums (*Trichosurus vulpecula*) are numerous in the park, as they are throughout the metropolitan area. The long-nosed bandicoot (*Paramelomys nasuta*) colony on North Head is one of the few remaining colonies in Sydney. Ringtail possums (*Pseudocheirus peregrinus*), echidna (*Tachyglossus aculeatus*), water rats (*Hydromys chrysogaster*), brown antechinus (*Antechinus stuartii*), bats, flying foxes and a variety of snakes and lizards are also found within the park. The rare red crowned toadlet (*Pseudophryne australis*) has recently been found on Bradleys Head and North Head.

The last reported sighting in NSW of the threatened eastern quoll or native cat (*Dasyurus viverrinus*) was at Vaucluse in an area now part of Sydney Harbour National Park in 1966. Due to increasing urbanisation around the park's boundaries, it is unlikely to still exist within the park.

It was the practice in the past to release captured native animals, especially brushtail possums, into the park. This caused problems with resident brushtail possums, which are territorial. The Service now encourages people to try to learn to live with native animals, rather than to seek their relocation to an area where they will be unable to adapt and survive.

Approximately 150 species of birds have been recorded in the park in recent years, of which about 50 species are resident, 20 are migrant, 40 are regular visitors and the remainder vagrants. At least 44 species breed within the park, mostly in the woodland, forest and heath areas. In addition, the great cormorant (*Phalacrocorax varius*) and white-breasted sea eagle (*Haliaeetus leucogaster*) roost on cliff ledges on North Head, the nankeen kestrel (*Falco cenchroides*) and masked lapwing (*Vanellus miles*) breed on North and South Heads and the rock warbler (*Origma solitaria*) has been recorded breeding on a number of headlands. Little penguins (*Eudyptula minor*) are frequently sighted in waters adjacent to the park.

The separate sections of Sydney Harbour National Park are linked in a number of areas by corridors of vegetated land, managed by the many local councils which adjoin the harbour, to form a system of interconnected natural areas that are important wildlife corridors. To protect their nature conservation value it is essential that the Service promote the regeneration of native vegetation on the park, as well as promoting nature conservation practices on other public and private lands adjoining the park. Sympathetic land use practices, which recognise the importance of protecting natural habitats and processes, will greatly enhance the nature conservation value of the park.

Sydney Harbour National Park does not include the waters of Sydney Harbour. The park boundary with the harbour is the high water mark, although the rocky reefs bordering the park within the harbour are of high ecological value and are zoned as "Environment Protection" in the Sydney and Middle Harbours Regional Environmental Plan. Collecting of crustaceans from the shores of the park and its surrounds is prohibited under the Fisheries Management Act 1994.

Feral animals are commonly found within the park and include foxes, cats, rats, mice and rabbits. They have a major impact on native animal populations through predation and competition for habitat. The main areas of concern are North Head, Dobroyd Head, Middle Head, Bradleys Head and Nielsen Park. Rats and cats are a particular problem in high visitor use areas where their natural diet is supplemented by rubbish left by picnickers. Rabbits have been the subject of on-going programs at the Quarantine Station but the rabbit population persists. Rats are periodically baited on the islands.

Domestic cats and dogs are also common in Sydney Harbour National Park, despite being prohibited for many years. They can disturb and kill native animals, as well as posing a nuisance to visitors and fouling the park. Domestic animals are increasingly being prohibited in parks by local authorities; however alternative areas where dogs may be exercised exist near most areas of Sydney Harbour National Park.

Policies

- * Native animal habitats will be maintained in the park in order to maximise species diversity.
- * Release of native animals will not be permitted in Sydney Harbour National Park unless part of an approved research program.
- * The Service will encourage the maintenance of regional urban bushland to provide wildlife corridors, regional habitat diversity and migratory wildlife habitat complementing the natural values.
- * Visitors will not be allowed to bring dogs or other domestic animals into the park, with the exception of Seeing Eye or Hearing Dogs.
- * Research into the management of native animals in the park will be encouraged, with particular emphasis on the impacts of fire on native species, wildlife inventory and management of remnant park populations, notably bandicoots, little penguins and red crowned toadlets.
- * Research into appropriate control methods for introduced animals within urban settings will be encouraged.
- * Introduced animals will be controlled and where practicable eliminated.
- * The Service will seek to conduct co-operative animal control programs with park neighbours and Councils.

Actions

- * A comprehensive survey of the fauna of the park will be undertaken.
- * A program of priority research into native animals will be developed in conjunction with appropriate research institutions.
- * A centralised garbage disposal and recycling system will be introduced in the park to reduce the incidence of scavenging by native and introduced animals.
- * A public education program will be undertaken which will highlight the impact of cats, dogs and other introduced animals on natural areas and the need for them to be controlled.
- * A program to control cats, foxes, rabbits and rats will be implemented throughout the park. Priority will be given to the islands, North Head, Dobroyd Head, Middle Head and Bradleys Head.

4.1.6 Fire Management

The Service is bound by the Rural Fires Act 1997, as well as the National Parks and Wildlife Act 1974 and Service fire policy. The primary aims of the Service's management of fire are to protect life and property on and adjacent to its lands, to effectively manage bushfires for the conservation of the cultural, natural, scenic and recreational amenity of Service areas, and to co-operate with other organisations in fire management planning and implementation.

Fire has been a factor influencing the environment for thousands of years and is regarded as a natural phenomenon to which native plants and animals have adapted. The vegetation of the park has been subjected to a variety of fire regimes. Some areas within military and quarantine lands, or close to urban development, have been protected from fire, while others have been burnt regularly to protect property or through arson.

Only a small amount of hazard reduction burning has been undertaken in the park in recent years, with property protection on the park boundaries achieved by mechanically or hand cleared fire breaks. These are often maintained by neighbours but can result in a reduction of the effective size of the park and an increased weed problem on land adjoining fire breaks. It is planned to consolidate and improve the system of fire breaks and radiation zones on the boundary in co-operation with neighbouring authorities, councils, fire brigades and the community.

Although some areas of the park have recently been burnt (such as Dobroyd Head in 1990), lack of fire distinguishes much of the vegetation within Sydney Harbour National Park. This has resulted in unusually mature communities in some areas, with low species diversity in others, especially on Middle, Georges and Bradleys Heads and at Nielsen Park. The mature coastal heath within the Quarantine Station boundaries has been so long without fire that it is of scientific interest and provides an opportunity for research into the ecological impacts of fire exclusion on coastal heath.

The effect of fire depends on the frequency, intensity and the season in which fires occur. An important strategy in fire management is to establish a fire regime that is ecologically desirable, as well as socially acceptable. Too frequent and/or too intense fires may reduce the diversity of habitats, and possibly species, within natural areas. In some circumstances, frequent and extensive fires may lead to the local extinction of species. Many animal species and communities are fire sensitive and rely on recolonisation from surrounding areas following fire. Exclusion of fire from some environments can also lead to low species diversity.

In ecosystems like those present in Sydney Harbour National Park, it has been found that tall moist eucalypt forests will lose woody plant species if the frequency of fires exceeds two in quick succession within twenty years; if two or more high intensity fires completely scorch the canopy within one hundred years, and if no high intensity fires occur for one or two hundred years. Loss of woody plant species in open forest or woodlands may occur if the frequency exceeds two fires in quick succession within five years, or if there is less than one fire every thirty years. In

wet and dry heath loss of woody species will occur if the frequency of fires exceeds two fires in quick succession within eight years; three fires in quick succession within fifteen to thirty years, or if there are no fires within thirty years.

Fire regimes need to be developed for the various sections of the park, taking into account the species present, their fire histories and current research, and ensuring that fires are neither too frequent nor too infrequent.

A Service-wide computerised Geographical Information System (GIS) is in place and will be used to record information on fires and on native plants and animals within the District relevant to fire planning. Populations of indicator species will be monitored to evaluate the proposed fire regime thresholds for the different communities of native vegetation, and these may be modified in light of new scientific information.

Policies

- * Liaison will be maintained and co-operative strategies developed with authorities with a responsibility for lands adjacent to the park, fire brigades, local government and neighbours to ensure co-ordination in fire management in the national park and on adjoining lands.
- * All wildfires in Sydney Harbour National Park will be contained as soon as possible.
- * The co-operation of all relevant authorities, neighbours and visitors will be sought in eliminating unplanned fires.
- * Measures to lift the level of community understanding of the role and management of fire within Service areas will be promoted.
- * Research into the effects of fire on the natural environment will be undertaken and encouraged.
- * The District will maintain a fire information system to assist in the identification of high risk fire areas and trends in fire occurrence.
- * Fire management within Sydney Harbour National Park will aim to:
 - protect human life and property both within the park and adjacent to it;
 - maintain species habitat and diversity, avoid local extinctions of native plants and animals and enhance the conservation of rare and endangered native plants and animals; and,
 - protect structures and places of cultural heritage significance.

Actions

- * A fire management plan will be prepared for the park by December 1998 and placed on public exhibition.
- * The continued consolidation and improvement of the system of radiation zones, perimeter fire trails and hazard reduction zones around urban areas adjacent to the park will be undertaken in consultation with councils, fire brigades and the community.
- * Records of fire occurrence will be upgraded and maintained with particular emphasis on mapping and recording of the area, frequency, seasonality and intensity of fire.
- * Native plants and animals relevant to fire planning will be recorded and the ecological consequences of fire regimes will be monitored to measure appropriateness of fire regime thresholds. The results of such reviews will be used to determine fire management programs for the subsequent year or years.

4.2 USE OF THE PARK

The park will be managed to ensure that its use, by the general public, special interest groups, Service managers or other authorities, is appropriate and conforms with this plan of management.

Appropriate uses include:

- promotion and interpretation of the park's natural and cultural heritage;
- certain types of low-impact recreation; and
- management operations by the Service and other authorities with statutory responsibilities in the area.

4.2.1 Promotion and Interpretation

Sydney is the most popular destination within New South Wales for domestic tourists and the main entry point for international tourists visiting Australia. Many tourists, as well as locals, visit the park at some time because it covers the most prominent headlands surrounding Sydney Harbour and consequently has some of the best sites from which to view the city and the harbour.

Sydney Harbour National Park is particularly valuable for interpretation of aspects of the history of Sydney and New South Wales. Examples of almost all important periods in the development of Sydney can be seen in the park and themes such as defence and quarantine are particularly well represented. The Service currently runs regular guided tours of the Quarantine Station, Fort Denison and Goat Island. During school holidays tours are also conducted of the Middle Head fortifications,

South Head and Nielsen Park. Given the high population surrounding the park it is likely that these programs would be more heavily used if there was greater promotion and there is the potential for additional tours to be developed.

Sydney Harbour National Park is a popular venue for viewing events and promotions held on the harbour or in surrounding suburbs. Often these visitors are not aware that they are in a national park and may unintentionally cause damage to the park in their efforts to obtain better views. In the years leading up to the 2000 Olympic Games in Sydney increasing numbers of events will be staged on the harbour leading to increased use and greater opportunities for promotion of the park. Major events on the harbour will be used to emphasise the value and importance of the cultural and natural values of the park, and to emphasise that visitors are in a national park and should be careful not to cause unacceptable impact. The opportunity will also be taken to promote natural and cultural heritage conservation and the work of the Service generally.

Visitor surveys conducted in the park have identified a desire for more information on the park's natural and cultural heritage. Although there is a great deal of information on the park and its resources, much of it is not readily available as it is contained in unpublished reports. Distribution of information is difficult because of the dispersed nature of the park and the high local usage of most sections of the park. To address these difficulties a variety of approaches are required, including brochures which can be made available from offices and signs containing information on the area. The office at Greycliffe House in Nielsen Park has recently been supplemented by a visitor information centre in the gatekeepers cottage at the Quarantine Centre on North Head. In addition, Cadmans Cottage at Circular Quay has been adapted to provide a visitor information and booking centre for Sydney Harbour National Park.

Policies

- * Sydney Harbour National Park will be promoted as the "Gateway to Sydney".
- * Major events on the harbour will be used as opportunities to promote public appreciation of the natural and cultural values of the park, natural and cultural heritage conservation and the work of the Service generally.
- * The park will be promoted utilising:
 - guided tours and face-to-face interpretation at selected historic places, such as the Quarantine Station, Middle Head/Georges Head fortifications, Bradleys Head, Goat Island and Fort Denison;
 - interpretive signs, especially at historic places and areas of special scenic or natural value; and
 - brochures and other publications.
- * The promotion and interpretation of the park will emphasise:

- the outstanding scenery protected by the park;
 - the historic themes represented by places in the park;
 - the role of the park in protecting harbour foreshores;
 - the importance of protecting remnant bushland in the city; and
 - the interaction of people with the environment.
- * Casual tour guides or Discovery Rangers will be employed to undertake tours and interpretive activities on a user pays basis.

Actions

- * An interpretation plan will be developed for Sydney Harbour National Park.
- * Information boards showing roads, walking tracks and features will be established at North Head, Middle Head, Bradleys Head, Goat Island, Hermit Point, Nielsen Park and Gap Bluff.
- * The agreement of other authorities to erect directional signs and maps at existing wharf access points outside the park (Watsons Bay, Rose Bay, Manly, Taronga Zoo), at public transport nodes and at walking track entry points will be sought.
- * Signs will be erected along the Hermitage Foreshore walking track to interpret the impacts of urbanisation on the natural bushland.
- * Park information brochures will be upgraded and collated into saleable packages. Basic information on the park will continue to be made available for free to all visitors.

4.2.2 Recreational Opportunities

Sydney Harbour's beauty and variety of landforms has long attracted people to its shores and there are an estimated 2 million visits a year. When there are major events on the harbour, such as the start of the Sydney Hobart Yacht Race, visits by Tall Ships and on New Years Eve, large numbers of people congregate on the park foreshores.

Sydney Harbour will be a focus for sailing and other entertainment during the 2000 Olympics and for a number of events and entertainment leading up to the Olympics and the centenary of Federation in 2001. Subject to protecting the heritage values of the park, the Service will provide facilities to meet increased public use during these events in a manner which will also accommodate expected increased public use of the park in the moderate to long term following the years 2000 and 2001. In

particular, the hardening of tracks to key spectator points overlooking the harbour by the use of materials which are environmentally and aesthetically compatible with the setting will be undertaken. Temporary facilities and infrastructure such as portable toilets, stands and fencing may be erected for viewing the events. The placement of temporary facilities and infrastructure will be subject to environmental review.

A number of small sample surveys have provided the following indication of the pattern of more regular visitor use of Sydney Harbour National Park:

- The main reasons for visiting the park are to view the scenery and walk, followed by swimming and sunbathing at the beaches;
- The most appreciated features of the park are the peace and quiet and the views;
- Most visitors stayed for less than one hour (36% at Bradleys Head to 91% at Gap Bluff). Stays of one or two hours are more common at the beaches;
- The frequency of visits varies. Nielsen Park and Middle Head had high numbers of visitors (over 40%) who came at least once a week. Gap Bluff and Dobroyd Head had high numbers of first time visitors (over 40%);
- The main problems perceived by park visitors were rubbish, weeds and parking;
- Most people travel by car (65-85% depending on area) and 10-20% came on foot. Around 7% of visitors to South Head and Bradleys Head and 13% of visitors to Gap Bluff came by ferry. Most bus transport was to South Head and Gap Bluff (15% of visitors).

The park serves as both a local and regional resource with most access by car, although ferries are also used for access to the islands, South Head and Bradleys Head. Vehicular access to Sydney Harbour National Park is via the public road system with car parking generally provided outside the boundary of the park, although parking is available within the park at North Head, Collins Flat, Georges Head, Bradleys Head and Watsons Bay. The public vehicular access system is shown on the main map (centre pages). Parking at the most heavily used sites such as Nielsen Park, Watsons Bay and Bradleys Head becomes very crowded on weekends. Bus and/or ferry access is available to most parts of the park and it would be desirable to increase the numbers travelling to the park by public transport.

An extensive network of walking tracks provides access to places of scenic, natural and cultural interest. Some potentially dangerous places where visitor safety is an issue will be closed, safety fenced and/or signposted, although generally there is no desire to impede access to features of interest.

In 1988 a walking track was constructed between Manly and The Spit through the Dobroyd Head section of the park under a co-operative agreement between Manly Council and the Service. On the southern side of the harbour the Hermitage Walk was formalised along the foreshore between Nielsen Park and Rose Bay in 1992-3. Shorter walking tracks are located on North Head, South Head, Middle Head, Bradleys Head and at Nielsen Park. The walking track system is shown on the main map (centre pages).

Use of the harbour foreshores has altered over time. Changed work ethics and hours have led to increased use of the park by locals early in the morning and during the evening, and there is increased lunch time use of the park. Walking tracks are now being used more for exercise than viewing scenery and shorter periods of time are spent sitting in the sun.

Visitors participate in a range of activities apart from walking and sightseeing. Fishing, swimming and sunbathing are popular on the foreshore. Picnicking also occurs at many sites. No barbecues are provided although visitors may bring their own gas stoves. This is inconvenient for many visitors and electric barbecues are proposed in a number of areas. Heat bead fires will continue to be prohibited due to the potential fire danger. Camping and horseriding and rock climbing have never been permitted in Sydney Harbour National Park due to the small size of the park and the incompatibility of these activities with other park uses.

Group activities, such as parties, weddings and functions, are commonly held in the park and the demand for these types of functions is increasing. Booking of certain buildings (such as Athol Hall, parts of the Quarantine Station and Fort Denison) for functions is permitted as long as it does not prohibit normal public use. Other areas of the park will also be investigated for booking along similar lines. Use of Clark, Shark and Rodd Islands is restricted to bookings to ensure that they do not become overcrowded.

Fun runs, triathalons and small orienteering events are also held in parts of the park and have potential to contribute to damage to the natural vegetation. Due to the small size of the park and visitor use pressures, these events will be restricted to walking tracks and roads.

It is likely that the population surrounding Sydney Harbour National Park will decline slightly in number and increase in age over the next 15 years. Any growth in demand is therefore likely to be from the wider Sydney region and from tourists, with the emphasis on areas which are highly accessible and feature distinctive natural, cultural and/or scenic qualities. Already 70% of international tourists visit Sydney, and 50% of these visit the harbour and its foreshores.

North Head

Access to North Head is via North Head Scenic Drive to the North Head lookouts. Secondary roads lead to Collins Flat and past the sewerage works to Bluefish Point. A survey of North Head visitors found that most people came for the views and exercise. Many walk or jog along the edge of the Scenic Drive. Most visits were

relatively short (71% stay less than 1 hour). Surveyed visitors supported provision of more information, were divided over whether additional walking tracks should be provided, and were opposed to a kiosk, picnic areas or additional carparks at North Head.

Traffic management at North Head is a developing problem due to increased bus access, conflicts between pedestrian and vehicular use of North Head Scenic Drive and the limited height of the Parkhill Archway which restricts its use by buses. The Service, in conjunction with other North Head landowners, will investigate options for overcoming problems with the Parkhill Archway. Separate pedestrian access along North Head Scenic Drive will be provided to ensure public safety. An extension of the North Head walking track to Shelly Beach will also be constructed incorporating existing walking tracks where possible. New sections of track will be located away from cliffs although spur tracks may provide access to selected lookout points.

North Head will continue to be promoted for scenic viewing, and interpretation of the natural values of the headland. Car parking areas at North Head will be considered for hire for functions. Signs (on the road near the loop, near the entrance to the park and along the walking tracks) will be reviewed and an information bay will be established. A gate will be erected, just past the roundabout at the entrance to the Quarantine Station, to permit North Head area to be closed to vehicles at night to decrease vandalism.

The Quarantine Station is currently used for conferences and guided tours. Both activities are well patronised and booked well in advance. The wharf has recently been repaired to permit access by ferry to the station. Water based access to the Quarantine Station will be encouraged to reduce traffic pressure on Manly and North Head. Water access also allows visitors to gain a better appreciation of the way in which the station operated. The walking tracks from the Quarantine Station to Old Mans Hat and Store Beach require rerouting to reduce erosion.

Dobroyd Head

The Manly Scenic Walkway, from the Spit Bridge to Manly, is the main visitor facility in this section of the park. The track is popular with locals and tourists to Sydney, as it provides a bushwalk close to the city with views of the harbour. Around 20% of the users of the track are from neighbouring suburbs and 10% from interstate or overseas, with the remainder mainly from elsewhere in Sydney. Approximately 40% of those walking the track in 1993 were first time visitors.

The Manly Scenic Walkway can be accessed from a number of locations and public transport can be used to get from one end of the track to the other. Tania Park is a major access point approximately half way along the track, with good views available from lookouts near the road. Spur tracks lead off the main track to Grotto Point, Washaway Beach, Crater Cove and Reef Beach.

Swimming is popular at Reef Beach, Washaway Beach and many places along the shore in this section of the park. A number of beaches in the park, including Reef

Beach, were often used for nude bathing. Under recent amendments to the Local Government Act, the designation and policing of nude bathing is now the responsibility of local councils. Council may permit nude bathing by erecting notices to that effect with the consent of the person who owns or occupies the land.

Middle and Georges Heads

Access to these headlands is along Middle Head Road. Walking tracks lead to Cobblers Beach, Obelisk Beach and the Middle Head fortifications from the end of Middle Head Road, and to the shore and fortifications from a number of small parking areas along Chowder Bay Road.

A survey undertaken in 1993 found that the majority of people visit Obelisk and Cobblers Beaches for swimming and sunbathing, although bush walking, fishing and exploring the fortifications were also popular. Most people liked the peace and quiet and did not want any changes to the area except for improvements to the main parking area at the junction of Middle Head Road and Chowder Bay Road. This parking area, which is outside the park, is badly eroded.

Fires and vandalism of the fortifications, in particular Middle Head at night are a problem. Damage is also occurring to the bush above Obelisk Beach by people making their own tracks to find secluded sunbathing sites. The Middle Head area will therefore be closed to the public at night, fencing and signs will be erected where necessary, and unauthorised tracks will be closed and revegetated.

The Middle Head/Georges Head fortifications will continue to be used for historic tours and passive recreation. No additional facilities will be provided in this area of the park until improved access and parking can be provided.

Bradleys Head, Taylors Bay and Chowder Head

Bradleys Head is accessed via Bradleys Head Road or from the Taronga Zoo ferry wharf. Facilities include toilets, walking tracks and Athol Hall. Parking, which is available near Athol Hall and at the end of Bradleys Head, is limited and often filled to capacity on weekends. The gates to the headland are closed at night.

Surveys (in 1991 and 1993) found that most people stayed at Bradleys Head for less than 2 hours (65%) and came for the views (24-33%). Most visited the point and 27% visited the fortifications. The majority of visitors came by car, 20% come on foot and 8% by ferry. Improved signposting and parking, including marked parking spaces, were the main improvements suggested by those surveyed.

The parking area near the main entrance gate to Bradleys Head is eroding. It will be sealed and parking spaces marked. Athol Hall has been leased for use as a cafe and hall. Gazebos and electric barbecues may be provided near Athol Hall. The lookout area at the end of Bradleys Head will be landscaped and interpreted. Access to the Bradleys Head area by walking from Taronga Zoo wharf or by bus will be promoted and two lookout platforms may be constructed along the walking track.

A precinct plan has been prepared for Bradleys Head which provides for a new carpark to be constructed on a disturbed area on the ridge that is the site of a former cottage. The carpark should provide additional parking for visitors to this area and ameliorate the severe parking problems on Bradleys Head Road caused by both park and zoo use. Further investigation will be undertaken of the suitability and appropriateness of a carpark in this location

Apart from the walking track from Bradleys Head to Chowder Bay there are no other facilities in the Chowder Head or Taylors Bay areas of the park to the north and east of Bradleys Head. Dinghies associated with boats moored in Taylors Bay are left on the foreshore where they restrict access and cause some damage to the bush. The provision of racks for dinghies will be investigated but no other facilities will be constructed in these areas.

Nielsen Park and the Hermitage Foreshore

Access to Nielsen Park is by car, with parking in Greycliffe Avenue and other nearby streets, or by bus along Vacluse Road. Parking is limited and there are few opportunities to expand parking. Use of public transport access to Nielsen Park will continue to be promoted by the Service. The parking area in Greycliffe Avenue, outside the park, is subject to erosion and tree root compaction.

The main visitor use areas of Nielsen Park are Shark Beach, and the promenade and grassed areas behind Shark Beach. A kiosk, in a historic building, and toilets and dressing sheds are located behind the beach. A shark net encloses part of the beach during summer. This is the only netted beach within the park.

A visitor survey undertaken in May 1993 found approximately 40% of visitors to Nielsen Park came from Woollahra and Waverley Municipalities, with another 30% from the Eastern Suburbs. Most came by car, around 20% came on foot and 5% by bus. Most people (70%) at that time of year (autumn) stayed for less than 2 hours. An earlier summer survey in 1984 found the average length of stay was ½ to 1 day and the main activity undertaken was swimming.

The Halbert Pavilion, which was used as a workshop for some years, will be returned to its original design as an open picnic shelter and be available through a booking system for use by groups. Electric or gas barbecues may also be provided in this section of the park to eliminate the use of fossil fuel stoves which are considered a fire hazard. The feasibility and cost of extending the netted swimming season, or keeping the beach netted all year, will be investigated as will the feasibility of re-opening the old tunnel from the dressing sheds to the beach. An old walking track over Mount Trefle will be upgraded to provide a short loop bushwalk for visitors to Nielsen Park.

The Hermitage Foreshore track provides access from Nielsen Park to Rose Bay, as well outstanding views to the city. Tenders from boats moored in Hermit Bay are left on the shore and limit the area available for other users of this area. A limited number of special dinghy racks will be investigated.

Gap Bluff, Laings Point and South Head

Gap Bluff adjoins The Gap at Watsons Bay. It contains a mixture of natural bush and historic buildings with associated plantings. A popular walking track leads from The Gap to a number of lookouts on the bluff, past the old Armoury to the Officers Mess. A survey of visitors to Gap Bluff in 1993 found that 26% of visitors were from country NSW or interstate and 21% from overseas.

The track and associated interpretation at Gap Bluff will be upgraded, old areas of asphalt will be covered and planted with native species, and directional signs and signs identifying the area as part of Sydney Harbour National Park will be erected. The track will be promoted as a loop walk from The Gap over Gap Bluff and back past the Officers Mess. A walking track linking Gap Bluff to Inner South Head, via Cliff Street, will also be developed. The use of part of the Officers Mess and its surrounds for functions, lectures, community meetings and information and a shop by the Foundation for National Parks and Wildlife will be investigated. The carpark associated with the Officers Mess may be opened for public parking at peak use times.

Laings (Green) Point is a grassed area with scattered coral trees and a toilet block, located between Watsons Bay and Camp Cove. It is mainly used for picnicking and sunbathing. It is maintained by Woollahra Municipal Council. Because of limited parking and the small size of the point, no additional facilities will be provided in this part of the park.

South Head is accessed by a walking track from the end of Cliff Street at Camp Cove. The track passes behind Lady Bay, a designated nude bathing beach, and then loops around the Hornby Light and lighthouse keepers cottages. The walking track will be defined, directional and interpretive signposting erected and the area revegetated with native species.

The Islands

Access to the islands is by ferry, tour boat or private boat. Craft are permitted to off-load passengers but not to moor to the wharves as this restricts access by other boats. The number of visitors permitted on each island at any one time is controlled by bookings to ensure that ground areas, facilities and sewerage systems are not overloaded.

Shark Island has a picnic pavilion and a number of small picnic shelters. It can be booked by up to 500 people at any time and is popular with large groups. The provision of power to Shark Island would allow barbecues to be provided, improving facilities and limiting damage to the area caused by heat bead barbecues.

Clark Island is smaller with a more natural landscape and use is limited to small groups of no more than 15 people, with a maximum of 100 people permitted on the island at any one time. No barbecues are provided on Clark Island but visitors may bring gas stoves. Clark Island's natural values will be maintained and the island used to interpret the original natural environments of the harbour islands.

Rodd Island is also available for booking by groups, with a limit of 100 people permitted on the island at any one time. It has a number of small picnic shelters as well as the old hall.

Use of Fort Denison is currently restricted to guided tours and booked functions, but it is proposed to increase itinerant public access by means of a regular ferry service to the island. A cafe/kiosk will be established in part of the fort and self-guided interpretation will be developed. Access to the martello tower will continue to be restricted to guided tours.

Goat Island has recently been opened to the public for guided tours. In addition to its interpretive role the Queens Magazine and barracks building may be suitable for functions, and there are a number of historic residences which may be suitable for commercial use as a guest house and/or restaurant. The management of Goat Island will, however, continue to provide for public access and public use of the island as a primary means of achieving the Service's intention of interpreting the island to the public.

Many of the buildings on Goat Island are in need of substantial repairs and miscellaneous material has been left on the island by previous occupants. Consequently public access to the island will initially be restricted to guided tours, guest house/restaurant patrons and supervised functions. Any developments will be consistent with the conservation plan for Goat Island.

Policies

- * Recreational activities, including special events, will be managed to ensure the cultural, natural and recreational values of the park are maintained.
- * Public transport, boat and walking access to the park will be promoted as alternatives to private cars.
- * Mooring of vessels to wharves in the park will not be permitted.
- * The number of visitors permitted on the islands at any one time will continue to be monitored and limits may be amended as necessary.
- * The roads in the park are shown on the map. No additional roads or carparks will be constructed within the park, with the possible exception of car parking in the Quarantine Station and on the Bradleys Head ridge.
- * Parking will only be permitted in marked car parking areas.
- * Existing parking areas will be formalised where necessary to increase the number of spaces available for parking and to provide spaces for disabled drivers.

- * Facilities for disabled visitors will be provided in areas with good access and any new facilities will be developed to cater for disabled access where feasible.
- * The walking track system will be upgraded where necessary to protect the surrounding vegetation and to provide a high standard walking experience.
- * Informal tracks which are not part of the walking track system will be closed and rehabilitated.
- * The Quarantine Station, Gap Bluff Centre, Nielsen Park pavilion and kiosk, Athol Hall and designated areas at Ashton Park and the harbour islands will be available for group bookings for functions and meetings.
- * A marquee may be erected on pre-determined grassed areas of the park on an occasional basis only.
- * Orienteering, fun runs, walkathons, triathalons and the like, will only be permitted on formed walking tracks, roads and grassed sections of the park.
- * Bicycles, skateboards, roller blades and roller skates will not be permitted on walking tracks, the Nielsen Park promenade or the islands.
- * Camping, horseriding, rockclimbing and abseiling will not be permitted in Sydney Harbour National Park.
- * Portable gas fires will be permitted in the park but wood and heat bead barbecues will not be permitted.
- * Portable toilets and other temporary infrastructure may be provided in existing non-vegetated areas of the park, and mobile refreshment vendors may be permitted to operate under licence in the park, at peak visitor times and during special events.

- * Garbage bins will be removed from isolated locations within the park and centralised as far as possible in high visitor use areas in association with recycling bins.
- * Storage of dinghies associated with boats moored in Hermit Bay and Taylors Bay will be permitted in one designated area of the park in each bay. Dinghy racks for licensed use may be established. No other boat storage will be permitted on the park.
- * Nude bathing will be permitted on selected beaches in accordance with the Local Government Act 1993. Currently nude bathing is permitted on Obelisk Beach, Cobblers Beach and Lady Bay Beach.
- * The park or sections of the park may be closed to general public access for safety or other management purposes.

Actions

General

- * Specially designated disabled parking spaces will be provided near the North Head lookouts, Bradleys Head and the Greycliffe Avenue gate to Nielsen Park.
- * Signs will be erected at the start of the Bluefish Point, North Head, Middle Head, Shark Point, Bottle and Glass Point, South Head and Gap Bluff walking tracks regarding the natural hazards of steep cliffs in these areas.
- * Toilets for the disabled will be provided at Nielsen Park, Shark and Rodd Islands.
- * Existing walking tracks to the following spectator points will be progressively upgraded: North Head, Middle Head, Bradleys Head, South Head and the Hermitage Foreshore.
- * Parts of the walking tracks to the following spectator points will be upgraded to wheel chair standard: North Head, Middle Head, Bradleys Head and South Head.

North Head

- * The gate just past the Quarantine Station roundabout will be closed at night.
- * The road system on North Head will be reviewed in conjunction with other North Head landowners and Manly Council in order to provide better access for buses to the Quarantine Station and North Head.

- * The carpark and turning circle on Collins Flat Road will be sealed and parking bays marked.
- * A walking track will be constructed generally along North Head Scenic Drive to provide safe pedestrian access to the North Head lookouts.
- * The network of walking tracks on and to North Head will be improved to link the Manly Scenic Walkway, North Head Scenic Drive, North Head lookouts and Shelly Beach.
- * The walking tracks from the Quarantine Station to Old Mans Hat and Store Beach will be re-routed and upgraded.

Dobroyd Head/Reef Beach

- * A walking track to Crater Cove from the Manly Scenic Walkway will be upgraded. All other tracks leading to Crater Cove will be closed and rehabilitated.
- * A walking track to Grotto Point from the Manly Scenic Walkway will be upgraded. All other tracks leading to Grotto Point will be closed and rehabilitated.

Middle and Georges Heads

- * Negotiations will be undertaken with the Department of Defence to upgrade, and preferably seal, the parking area at the junction of Middle Head and Chowder Bay Roads.

Bradleys Head

- * The carpark near the Bradleys Head gate will be sealed and parking bays marked.
- * The lookout area near the end of Bradleys Head will be landscaped and interpreted.
- * Two lookout platforms which are wheelchair accessible may be constructed along the walking track from Taronga Zoo wharf to Bradleys Head.
- * Further investigation will be carried out to determine the suitability of a new car park on Bradleys Head ridge.
- * Electric barbecues and a small number of gazebo-style picnic shelters may be provided near Athol Hall.
- * The establishment of dinghy racks at Taylors Bay will be investigated.

Nielsen Park and the Hermitage Foreshore

- * The Halbert Pavilion will be made available through a booking system for use by groups. Use of the pavilion will be limited to between the hours of 7am to 9pm.
- * The feasibility of extending the period when the Nielsen Park shark net is in place will be investigated.
- * Electric or gas barbecues may be provided at Nielsen Park and/or Bottle and Glass Point.
- * Negotiations will be undertaken with Woollahra Council to address local traffic and parking problems.
- * The walking track over Mount Trefle will be upgraded where necessary and signposted.
- * The tunnel from the Nielsen Park dressing sheds to the beach may be restored, subject to environmental impact assessment, consistency with a conservation plan and availability of resources.
- * The establishment of dinghy racks at Hermit Bay will be investigated.

Gap Bluff, Laings Point and South Head

- * A link walking track between Gap Bluff and Inner South Head, either through to Cliff Street or behind the Cliff Street staff residences, will be investigated.
- * Picnic tables may be provided on the point at Camp Cove.

The Islands

- * The wharf at Fort Denison may be upgraded to permit its use by large ferries.
- * Some of the wharves at Goat Island may be upgraded to improve public access.
- * Regular scheduled ferry services to Fort Denison will be encouraged.
- * Electric barbecues may be provided on Shark and Rodd Islands.

4.2.3 Management Operations

The Sydney District office is located in Greycliffe House at Nielsen Park, Vacluse. A sub-district office and workshop for the southern side of the harbour is also located at Nielsen Park. A sub-district office and workshop for the islands has been established on Goat Island and a third sub-district office and workshop which

services the northern side of the harbour is located within the Quarantine Station. Additional workshop facilities are located at Middle Head. The facilities at the Quarantine Station may have to be relocated if the Quarantine Station is leased.

Most of the park is connected to mains power, gas, water and sewage services. Much of the sewage and water infrastructure in the park is old and requires renewal or upgrading to meet acceptable standards. Sewage disposal is a problem in some parts of the park, including the Quarantine Station and Rodd, Shark, Clark and Goat Islands, and in these areas sewerage services are progressively being upgraded. The upgrading of the electricity supply to Shark and Rodd Islands so that it is sufficient for electric barbecues will be investigated. Electricity is not connected to Clark Island and it is not proposed to change this situation. Garbage is collected by park staff from all areas, except the islands and isolated foreshore areas where contractor collection services are used.

The National Parks and Wildlife Service has permission to use access roads through 10 Terminal Regiment to Middle Head and through HMAS Watson to South Head for park management purposes and to access staff accommodation.

There are also a large number of leases, licences and other occupancies within Sydney Harbour National Park held by other authorities. These include:

- navigational aids on North Head, Middle Head, Fort Denison and Goat Island;
- access to the School of Artillery, Federal Police College, North Head Sewerage Treatment Works, Army Maritime School at Chowder Bay, the Navy degaussing station at Steel Point, HMAS Watson, MSB tidal gauging station at Camp Cove, and the Hornby Light;
- the MSB tidal gauging station and Bureau of Meteorology anometer on Fort Denison;
- power lines to various light stations,
- sewerage pipelines from HMAS Watson;
- power lines and light poles on North Head, South Head and Bottle and Glass;
- an electricity sub-station on Gap Bluff;
- light poles on Middle Head and Morella Road;
- a gas pipeline on North Head;

- a sewerage pumping station at Taylors Bay;
- the Navy degaussing station on Shark Island;
- the main cross-harbour telephone cable which crosses Goat Island; and
- the NSW Police Department radio shed and mast on Middle Head.

Some of these facilities are no longer used and negotiations will be initiated to remove them. Others need to be licensed or subject to formal management agreements.

Utilities and management facilities in the park require regular maintenance and it is proposed to incorporate these into an assets management system, so that their number, extent, condition, replacement and annual maintenance costs is quantified and appropriate levels of funding sought and acquired for their management. Facilities which are not required for park management or visitor use, such as much of the wharfage around Goat Island, will be removed.

Policies

- * All park assets will be incorporated into a total asset management system, to ensure that these assets are recorded, their condition regularly monitored and costs associated with cyclical maintenance are clearly identified.
- * Sewerage disposal within the park will progressively be upgraded, as necessary to meet Environment Protection Authority standards.
- * Existing structures, where practical, will be re-used in preference to the construction of any new buildings in the park.
- * Limited vehicular access may be provided by permit to management authorities, utilities maintenance crews, media and special user groups to areas normally closed to vehicles.
- * All unlicensed easements or facilities will be licensed or subject to management agreements.
- * The Service will promote recycling practices and use recycled materials wherever possible throughout the park.
- * No new toilets will be constructed in the park unless they are connected to a sewer or an on-site treatment plant. Existing toilets will be progressively connected to a sewerage system, modified to a pump-out system or provided with on-site treatment facilities and upgraded to cater for disabled users where appropriate.
- * The office and workshop servicing the north side of the harbour will be relocated from the Quarantine Station if necessary.

Actions

- * A total asset management program will be developed and maintained.
- * Wharfage at Goat Island which is in poor repair and which is not necessary for Service or lessee operations will be removed.
- * Negotiations will be undertaken with power supply utilities to remove electricity posts no longer required.
- * A register of leases, licences, easements and other occupancies within the park will be established and maintained.

5. PLAN IMPLEMENTATION

This plan of management is part of a system of management developed by the National Parks and Wildlife Service. The system includes the National Parks and Wildlife Act, the Service's corporate plan, management policies and established conservation and recreation philosophies. It also includes regional and district strategic plans.

The orderly implementation of this plan will be undertaken within the annual programs of the Service's Sydney District. Priorities, determined in the context of district and regional strategic planning, will be subject to the availability of necessary staff and funds and to any special requirements of the Minister or Director-General.

District programmes are subject to ongoing review within which works and other activities carried out in Sydney Harbour National Park will be evaluated in relation to the objectives laid out in this plan.

The environmental impact of development proposals will continue to be assessed at all stages of the development and any necessary investigations undertaken in accordance with established environmental assessment procedures.

Under Section 81 of the National Parks and Wildlife Act, this plan shall be carried out and given effect to by the Director-General and no operations shall be undertaken in relation to the national park unless they are in accordance with this plan. If after adequate investigation, operations not included in the plan are found to be justified, this plan may be amended in accordance with section 75 of the Act.

Other lands may be added to the park during the term of this plan. Such lands will be managed in accordance with the objectives and policies of this plan.

As a guide to the orderly implementation of the plan, relative priorities for identified activities are summarised below:

Activity	reference (in plan)
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HIGH PRIORITY

Erosion control - Bluef Drive, Cobblers Beach Road, and Bradleys Head	4.1.1
Screen plant in front of toilets near Lady Bay	4.1.1
Assess radio masts on Middle Head, remove non-historic	4.1.1
Establish upgraded historic heritage register	4.1.3
Erect interpretative signs at highly visible historic sites	4.1.3
Seek tenders for leasing Quarantine Station	4.1.3
Gate vulnerable and dangerous fortifications	4.1.3
Gate & stabilise beehive casemates	4.1.3
Establish interpretation of barracks & magazines, Goat Island	4.1.3

HIGH PRIORITY (continued)

Lease Goat Island slipway	4.1.3
Establish cafe & function area - Fort Denison	4.1.3
Prepare guidelines for <i>Allocasuarina portuensis</i>	4.1.4
Prepare weed control program	4.1.4
Implement priority weed control measures	4.1.4
Encourage expansion of volunteer bush regeneration program	4.1.4
Undertake feral animal control - North, Dobroyd, Middle, Bradleys Heads	4.1.5
Prepare fire management plan	4.1.6
Establish disabled parking at Greycliffe Ave, & Bradleys & North Heads	4.2.2
Erect signs warning of steep cliffs	4.2.2
Establish disabled toilet facilities - Nielsen Park	4.2.2
Upgrade walking tracks to spectator points	4.2.2
Investigate traffic management requirements - North Head	4.2.2
Construct walking track along North Head Scenic Drive	4.2.2
Upgrade Goat island wharves	4.2.2
Encourage regular ferry service to Fort Denison	
4.2.2	
Develop total asset management program for park	4.2.3
Remove unnecessary wharfage at Goat Island	4.2.3

MEDIUM PRIORITY

Erosion control - Manly Scenic Walkway and Island sea walls	4.1.1
Establish a program for regular Aboriginal site monitoring	4.1.2
Prepare conservation guidelines - QS engravings and North Head walls	4.1.3
Prepare Crater Cove management guidelines	4.1.3
Make hut(s) available for inspection at Crater Cove	4.1.3
Prepare maintenance schedule - Georges & Middle Heads forts	
4.1.3	
Restore pathways, amphitheatre & walls in Athol Hall precinct	4.1.3
Conserve timber gun carriage - Bradleys Head	4.1.3
Return Halbert Pavilion to original condition	4.1.3
Restore and interpret water police station, Goat Island	4.1.3
Investigate demolition of amenities buildings, Goat Island	4.1.3
Install self-guided interpretive signs on Fort Denison	4.1.3
Remove garden beds & BBQ on Fort Denison	4.1.3
Assess condition of paths & grottos on islands	4.1.3
Undertake park flora survey	4.1.4
Conduct education program on weeds	4.1.4
Undertake park fauna survey	4.1.5
Improve garbage collection & recycling system	4.1.5
Conduct education program on problems of dogs and cats	4.1.5
Consolidate fire protection zones	4.1.6
Upgrade fire record system	4.1.6
Prepare park interpretation/promotion plan	
4.2.1	
Establish information bays at selected locations	4.2.1

MEDIUM PRIORITY (continued)

Erect directional signs & maps at park wharf/bus access points	4.2.1
Gate North Head at night	4.2.2
Extend walking tracks on North Head	4.2.2
Formalise Grotto Point & Crater Cove walking tracks	4.2.2
Investigate dinghy racks - Hermit Point & Taylors Bay	4.2.2
Provide lookouts on Bradleys Head walking tracks	4.2.2
Investigate extending Nielsen Park swimming season	4.2.2
Establish booking system for Halbert Pavilion	4.2.2
Upgrade Fort Denison wharf	4.2.2
Develop alien tenure register	4.2.3

LOW PRIORITY

Erosion control - Hermit Point, Bradleys Head seawalls	4.1.1
Review signs and other structures for visual impact	4.1.1
Investigate excavation of Middle Head defence ditch	4.1.3
Remove carport, clothes line & slippery dip at Athol Hall	4.1.3
Prepare landscape management plan - Nielsen Park	4.1.3
Investigate adaption and use of Goat Island house and cottages	4.1.3
Investigate uses for buildings: South Head, Laings Point, Camp Cove	4.1.3
Prepare research priorities - native plants and animals	4.1.4
Establish program to monitor the ecological consequences of fire regimes	4.1.6
Erect interpretive signage - Hermitage Foreshore	4.2.1
Collate park information into saleable packages	
4.2.1	
Seal & formalise carparking - Collins Flat	4.2.2
Upgrade Old Mans Hat & Store Beach walking tracks	
4.2.2	
Upgrade and seal Middle Head parking area	4.2.2
Seal & mark Bradleys Head gate parking area	4.2.2
Landscape carpark at end of Bradleys Head	4.2.2
Investigate new carpark on Bradleys Head ridge	4.2.2
Upgrade Mount Treffle walking track	4.2.2
Investigate opening of tunnel to Nielsen Park beach	4.2.2
Construct Gap Bluff to South Head walking track	4.2.2
Provide electric BBQs at selected locations	4.2.2
Establish disabled toilet facilities - Rodd Island	4.2.2
Negotiate removal of power poles no longer required	4.2.3

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Sydney Harbour National Park

Amendments to the 1998 Plan of Management

November 2003

**PARKS
SERVICE
DIVISION,
DEPARTMENT OF
ENVIRONMENT
AND
CONSERVATION**

INTRODUCTION

On 17 November 2003 the Minister for the Environment adopted the following amendments to the Plan of Management (PoM) for Sydney Harbour National Park, which was adopted in October 1998.

The 1998 Plan of Management for Sydney Harbour National Park states that adaptive reuse of some historic buildings will be undertaken to optimise public access and that the private sector may be involved in this process. Since 1998 several proposals for leasing historic buildings and structures have been investigated or undertaken. Conservation management plans have been prepared which have indicated that a range of uses can be undertaken which are compatible with the retention of the cultural significance of the buildings and structures. The amendments follow on from these proposals in the adopted plan and meet the requirements of the 2002 amendments to the *National Parks and Wildlife Act 1974* in relation to leases and licences. They also update the plan in relation to the protection of the populations of Long-nosed Bandicoots and Little Penguins that have been identified in the North Head area since 1998.

Amendments to the plan of management for Sydney Harbour National Park were placed on public exhibition from 2 May 2003 to 4 August 2003. The exhibition of the amendments attracted 272 submissions, which raised a total of 19 issues. All comments received were referred to the Sydney Region Advisory Committee and the National Parks and Wildlife Advisory Council for their consideration and advice. The comments and suggestions of the Advisory Committee and the Advisory Council were in turn considered by the Minister when adopting these amendments to the plan of management for Sydney Harbour National Park.

ADOPTED AMENDMENTS

1. Use of the park

Insert a new section on page 49 of the plan of management in section 4.2 'Use of the Park' as follows:

4.2.4 Use of Land, Buildings, Structures and Modified Natural Areas under Section 151B of the National Parks and Wildlife Act

Adaptive reuse of buildings and structures will be permitted provided any proposed modification and use is carried out in a sustainable manner, is consistent with the conservation of the natural and cultural values of the land, and is compatible with the retention of the cultural significance of the buildings and structures. A range of uses for historic buildings and structures is considered appropriate in providing greater diversity and flexibility of use, improved public access and to ensure conservation outcomes for buildings and structures.

This does not necessarily mean that all the uses that are listed below will actually occur at these sites, but this range will give greater flexibility if and when any compatible adaptive reuse proposals are considered for particular buildings and structures.

Detailed precinct plans will be prepared for the Nielsen Park, Gap Bluff and Inner South Head, and Goat Island precincts in Sydney Harbour National Park. The plans will be completed prior to the issue of any lease under Section 151B of the National Parks and Wildlife Act for buildings and structures within these three precincts (see Maps 3, 4 and 6).

The precinct plans will be informed by conservation management plans prepared in accordance with the Heritage Act 1977, a landscape plan showing routes of access and any proposed landscape changes, relevant threatened species recovery plans and a review of Aboriginal heritage values. The precinct plans will identify existing infrastructure, natural heritage values, social values, potential threats, constraints and opportunities.

The precinct plans will be prepared with input from the community and a draft will be exhibited for public comment as an amendment to the Sydney Harbour National Park plan of management.

All proposals to issue leases under Section 151B in Sydney Harbour National Park will be subject to environmental impact assessment in accordance with the Environmental Planning and Assessment Act 1979. The proposal and the environmental impact assessment are to be placed on public exhibition for a period of at least 60 days.

The following places in Sydney Harbour National Park may be considered for leasing under Section 151B(2) of the National Parks and Wildlife Act:

- *Quarantine Station (All buildings and structures within the area shown on Map1);*
- *Bradleys Head (Athol Hall and all associated buildings and structures within the area shown on Map 2);*
- *Nielsen Park (All buildings and structures within the area shown on Map 3);*
- *Gap Bluff and Inner South Head (All buildings and structures within the area shown on Map 4);*
- *Fort Denison (All buildings and structures within the area shown on Map 5);*
- *Goat Island (All buildings and structures within the area shown on Map 6).*

The purposes for which places may be leased as set out in Section 151B(12) of the National Parks and Wildlife Act are:

- *Educational facilities for natural heritage, cultural heritage, park management or fire management;*
- *Research facilities for natural heritage (including natural phenomena) and cultural heritage;*
- *Retail outlets commensurate with the needs of the area in which that outlet is located;*
- *Restaurants, cafes, kiosks and other food outlets;*
- *Cultural institutions, including museums and galleries;*
- *Visitor and tourist accommodation;*
- *Facilities for conferences and functions;*
- *Sporting facilities;*
- *Facilities and amenities for tourists and visitors, including information centres and booking outlets;*
- *Facilities in relation to Aboriginal culture and Aboriginal cultural activities.*

Areas in the park are often requested for or required for short-term exclusive uses such as community events, private functions (eg. weddings), group picnics and cultural events. Licences may be granted to use land, buildings and structures in the park for exclusive use for any purpose provided the land is a modified natural area¹ and is granted for a period of not more than three consecutive days.

¹ *A modified natural area is defined as “an area of land where the native vegetation cover has been substantially modified or removed by human activity (other than activity relating to bushfire management or wild fire management) and that is defined in a plan of management as not being appropriate or capable of being restored.”*

It should be noted that no licences would be granted where there are unacceptable impacts on the natural and cultural heritage values of the reserve.

The following places in Sydney Harbour National Park may be considered for short-term licences under Section 151B(3) of the National Parks and Wildlife Act:

- *Quarantine Station (All buildings, structures and modified natural area within the area shown on Map 1);*
- *Bradleys Head (All buildings, structures and modified natural area within the area shown on Map 2);*
- *Nielsen Park (All buildings, structures and modified natural area within the area shown on Map 3);*
- *Gap Bluff and Inner South Head (All buildings, structures and modified natural area within the area shown on Map 4);*
- *Fort Denison (All buildings, structures and modified natural area within the area shown on Map 5);*
- *Goat Island (All buildings, structures and modified natural area within the area shown on Map 6).*

The purposes for which short-term licences may be granted under Section 151B(3) of the National Parks and Wildlife Act are:

- *Community events;*
- *Sporting events;*
- *Group picnics;*
- *Private functions;*
- *Cultural events;*
- *Filming activities;*
- *Military activities;*
- *Commercial activities.*

Add three new policies after the above text which state:

- “ *The Nielsen Park, Gap Bluff and Inner South Head, and Goat Island precincts of the park will be subject to detailed precinct planning followed by an amendment to this plan of management before any new leases for adaptive reuse are granted.*
- * *The Quarantine Station may be leased for the purposes listed in the plan consistent with any conditions of consent issued by the determining authorities.*
- * *Short-term licences for the purposes listed in the plan may be issued for the buildings, structures and modified natural areas shown on Maps 1-6.”*

2. Quarantine Station, North Head

Page 22 Sect. 4.1.3 Historic Heritage. Policies, North Head, 2nd asterisk states:

“* Tenders will be sought for the leasing of the Quarantine Station for uses which are consistent with the National Parks and Wildlife Act, the conservation plan for the whole complex, and are generally consistent with the existing patterns of public use. This may include use of the area for public accommodation, conferences and/or a function centre.”

Replace the above paragraph with the following:

- “* *A lease may be granted for the permissible purposes listed in the plan to enable the adaptive reuse of the buildings and structures at the Quarantine Station within the area shown on Map 1.*
- * *A licence may be granted for the permissible purposes listed in the plan of an building, structure and modified natural area within the area shown on Map 1.”*

3. Bradleys Head

Page 23. Sect.4.1.3 Historic Heritage. Policies, Bradleys Head, 1st asterisk states

“* Athol Hall will be adapted for use as a café and hall. Minor alterations will be permitted in the building, including integration of the hall and caretakers residence and construction of a kitchen/store/toilet component midway along the eastern elevation.”

Replace the above paragraph with the following dot points:

- “* *A lease may be granted for the permissible purposes listed in the plan to enable the adaptive reuse of buildings and structures at Athol Hall, Bradleys Head within the area shown on Map 2.*
- * *A licence may be granted for the permissible purposes listed in the plan of any building, structure and modified natural area within the area shown on Map 2.”*

4. Nielsen Park

Page 40. Sect.4.2.2 Recreational Opportunities, Nielsen Park and the Hermitage Foreshore, 4th paragraph states:

“* The Halbert Pavilion, which was used as a workshop for some years, will be returned to its original design as an open picnic shelter and be available through a booking system for use by groups. Use of the pavilion will be limited to between the hours of 7am to 9pm.”

Delete the paragraph.

Page 23. Section 4.1.3 Historic Heritage, Policies, Nielsen Park, add the following new dot points:

- “* *A lease may be granted for the permissible purposes listed in the plan to enable the adaptive reuse of the buildings and structures at Nielsen Park within the area shown on Map 3.*
- * *A licence may be granted for the permissible purposes listed in the plan of any building, structure and modified natural area within the area shown on Map 3.”*

5. Gap Bluff and Inner South Head

Page 23, Section 4.1.3 Historic Heritage, Policies, South Head first paragraph states:

“*The lightkeepers’ cottages on South Head have been stabilised and options for their future use, and for use of the Constables Cottage at Camp Cove and the house on Laings Point, will be investigated. Any proposals for use of the buildings will be placed on public exhibition.”

Page 41, Sect. 4.2.2 Recreational Opportunities, Gap Bluff, Laings Point and South Head, 2nd paragraph states:

“The use of part of the Officers Mess and its surrounds for functions, lectures, community meetings and information and a shop by the Foundation for National Parks and Wildlife will be investigated.”

Delete both paragraphs and replace with the following dot points on page 23, Section 4.1.3 Historic Heritage, Policies, South Head:

- “* *A lease may be granted for the permissible purposes listed in the plan to enable the adaptive reuse of the buildings and structures at Gap Bluff and Inner South Head within the area shown on Map 4.*
- * *A licence may be granted for the permissible purposes listed in the plan of any building, structure and modified natural area within the area shown on Map 4.”*

6. Fort Denison

Page 24, Sect. 4.1.3 Historic Heritage, Fort Denison add after the second dot point the following dot points:

- “* *A lease may be granted for the permissible purposes listed in the plan to enable the adaptive reuse of the buildings and structures at Fort Denison within the area shown on Map 5.*

- * *A licence may be granted for the permissible purposes listed in the plan of any building, structure and modified natural area within the area shown on Map 5.*

7. Goat Island

Page 24, Sect.4.1.4 Historic Heritage, Goat Island last dot point states

*“*Any proposals for the use of the buildings and the construction of new buildings will be placed on public exhibition as an amendment to the plan.”*

Delete this sentence and replace with the following dot points:

- “* A lease may be granted for the permissible purposes listed in the plan to enable the adaptive reuse of the buildings and structures at Goat Island within the area shown on Map 6.*
- * *A licence may be granted for the permissible purposes listed in the plan of any building, structure and modified natural area within the area shown on Map 6.”*

8. Native Animals

Page 29, Sect.4.1.5 Native and Introduced Animals, add to the end of the second paragraph the following sentence:

*“ The Little Penguin (*Eudyptula minor*) colony at North Sydney Harbour is the only known breeding colony on mainland NSW. The colony has been listed as an Endangered Population under the Threatened Species Conservation Act 1995. Critical habitat was declared for the Little Penguin colony in December 2002 under the Threatened Species Conservation Act. Figure 2 is a map of the Little Penguin Critical Habitat area.”*

Page 30, Sect.4.1.5 Native and Introduced Animals, add the following actions:

- “* Long-nosed Bandicoots will be monitored in accordance with the conditions of approval of the Quarantine Station lease.*
- “* Little Penguins and their critical habitat will be monitored in accordance with the conditions of approval of the Quarantine Station lease.”*