Volume 2: Apple Tree Bay Masterplan 2006

Ku-ring-gai Chase National Park

NSW **National Parks and Wildlife Service**

Department of **Environment and Conservation** NSW

Volume 2: Apple Tree Bay Masterplan 2006
Ku-ring-gai Chase National Park

Part 1: Masterplan
Part 2: Conservation Management Plan
Part 3: Landscape Management Plan

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Prepared for:
Department of Environment and Conservation

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Department of **Environment and Conservation** NSW

Client

Department of Education and Conservation
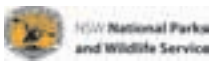
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External Stakeholders

The External Stakeholders gave freely of their time, their enthusiasm and intimate knowledge of the parklands, which was of enormous benefit to the Masterplanning team. The External Stakeholders included:

NAME (no order)	Organisation
Pam Goldie	Chase Alive
Margarita Clayton	Coast Alive
Kurt Henkel	Landscape Coordinator, Hornsby Shire Council
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Lavinia Schivella	Boating Industry Association
Bruce Foot	Gibberagong Field Studies Centre
Steven Head	Director, Open Space Ku-ring-gai Council
Jennifer Davis	District Officer, NSW Fisheries
Patricia Giles	Advisory Committee
Lynn Parker	River Canoe Club

Abbreviations

AMBS
Australian Museum Business Services

AHIMS
Aboriginal Heritage Information and
Management Systems

CMP
Conservation Management Plan

COAG
Council of Australian Governments

DDA
Disability Discrimination Act

DEC
Department of Environment and Conservation

DMR
Department of Main Roads

EMP
Environmental Management Plan

EP&A
Environmental Planning and Assessment

EPBC
Environment Protection and Biodiversity
Conservation Act

EPR
Environmental Protection and Regulation

ESD
Environmentally Sustainable Design

ICOMOS
Australian Charter for the Conservation of
Places of Cultural Significance

IDA
Integrated Development Approvals

KCNP
Ku-ring-gai Chase National Park

KCT
Ku-ring-gai Chase Trust

KCLC
Ku-ring-gai Chase Local Committee

LEP
Local Environmental Plan

LMP
Landscape Management Plan

MLALC
Metropolitan Local Aboriginal Land Council

NPWS
National Parks and Wildlife Service

NSW
New South Wales

NTS
Not to Scale

OHS
Occupational Health and Saftey

REF
Review of Environmental Factors

RTA (NSW)
Roads and Traffic Authority NSW

SESL
Sydney Environmental and Soils Laboratory

TSC
Threatened Species Conservation Act

WWII
World War II

WSED
Water Seniture Environmental Design

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PART 1: MASTERPLAN

Contents - Part 1 Masterplan

The Contents of Part 2 - Conservation Management Plan and Part 3 - Landscape Management Plan are found within the report.

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Part 1: Masterplan

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Part 1: Masterplan

Executive Summary

Apple Tree Bay Masterplan 2006 describes the Vision for the upgraded parklands and facilities, which are the most comprehensive improvements proposed since the completion of the reclamation of the mudflats of Apple Tree Creek in the 1950s and 1960s. The Conservation Management Plan guides the Masterplan to ensure the conservation of cultural landscape that makes Apple Tree Bay one of the premier recreation places in the Ku-ring-gai Chase National Park is preserved.

The revitalised parklands of Apple Tree Bay will integrate sympathetically with the bushland and waterways that make up the Ku-ring-gai Chase National Park. Endemic and native tree species and plantings, informal landscape layouts, discreet signage and furniture will enhance the recreational experience. Boat launching will be made easier, safer and more efficient with appropriate traffic management and security. Parking of trailers and cars will be located at the rear of the parklands so that the foreshore and kiosk areas become focal points for recreation activities. The new parking layouts will optimise parkland space for picnicking, walking and barbecuing. The beauty and serenity of Apple Tree Bay will be able to be enjoyed by everybody.

Sustaining the parklands and amenities for future generations, making them safe, and a positive recreational and educational experience, while passive and active recreational pursuits are undertaken in a quiet picnicking atmosphere, are central to this Vision.

The Landscape Management Plan describes how the Vision is achieved in design, planning, management and implementation. Community and stakeholder consultation throughout the Masterplanning process informed the recreational planning, which in turn guided the design and development of the landscape design. The Landscape Management Plan also identifies key opportunities for the future development of the parklands.

The Masterplan should be read in conjunction with the Conservation Management Plan, the Landscape Management Plan, and all the Appendices, which include specialist consultant reports. The Masterplan draws upon all the reports, and guides the future design and development, including management strategies to develop a more sustainable outcome for the parklands. This Masterplan should also be read in conjunction with the Bobbin Head Masterplan (Volume 1).

The entire Masterplanning process included extensive Community, External Stakeholder, Project Control Group, RTA (NSW) and National Parks and Wildlife Service Regional Advisory Committee consultation. The consultation culminated in the Public Exhibition of the Draft Masterplan with invited comment. Reference should be made to the Summary and Detailed Submissions Reports regarding the Draft Masterplans, which contain information regarding the consultation process, exhibition, feedback, submission and agreed recommendations for improvements to the Draft Masterplan to achieve final status.

Concurrent with the finalisation of the Draft Masterplan, an estimated costing of the Masterplan was undertaken by the Masterplanning Team, so that funding for implementation of the Masterplan could be prioritised by Department of Environment and Conservation / National Parks and Wildlife Service over a 30 year period. Some funds were allocated in the 2005 / 06 financial year for the project; additional funding will be sought for other works to commence in the future.

The complete Masterplan was finalised in August 2006.

The Masterplan is intended to be adopted by an updated Ku-ring-gai Chase National Park Plan of Management within the next four years. These two documents will be updated on a regular basis to ensure that the parklands maintain their status as the premier recreational areas in the National Park. Consequently, future generations of tourists and visitors will continue to benefit from the cultural landscape experience of Apple Tree Bay.

Volume 1 is the Masterplan for Bobbin Head.
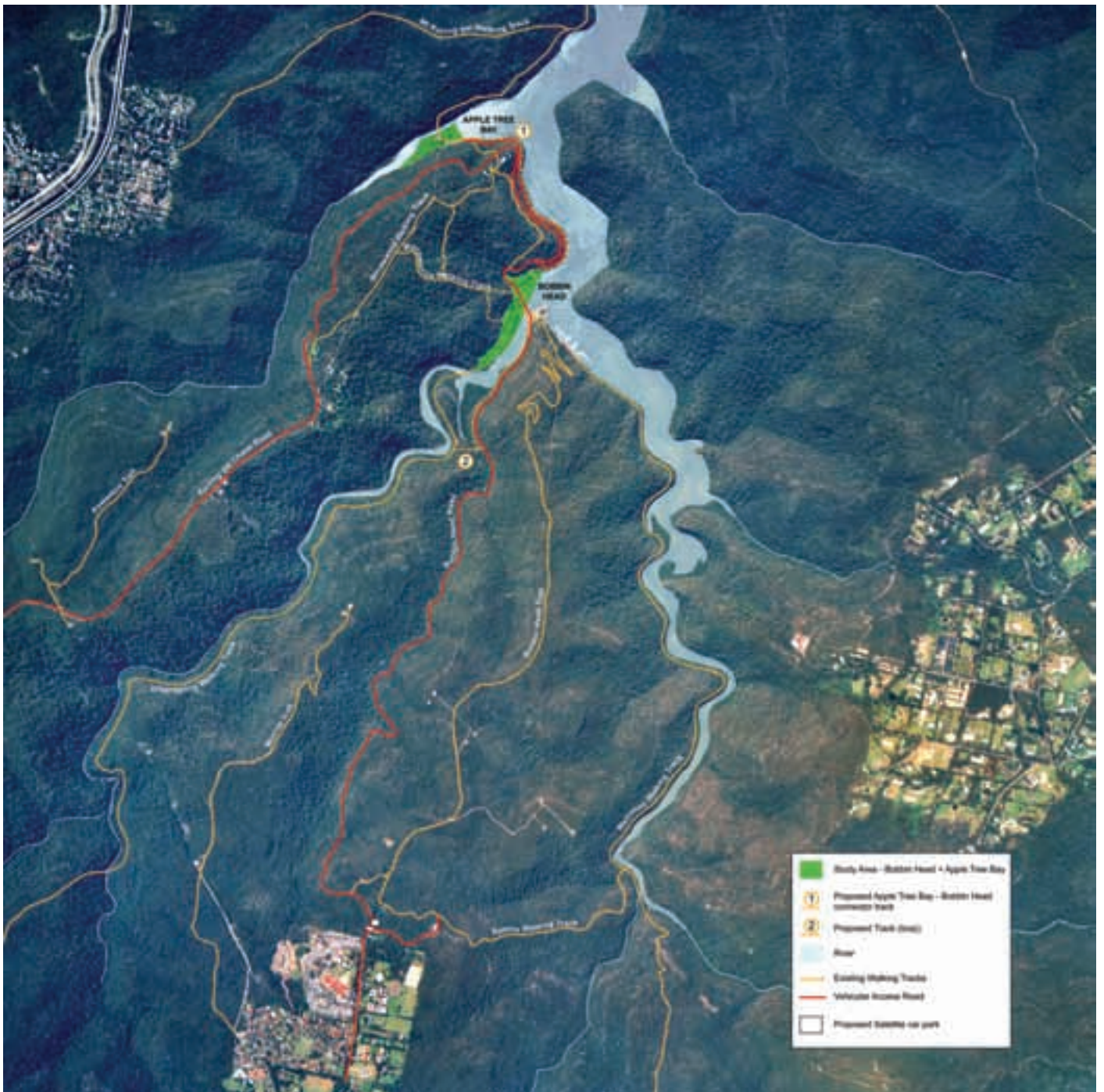
Figure 1.1 Aerial plan of tracks, Ku-ring-gai Chase National Park - NTS

1.0   Introduction

Ku-ring-gai Chase National Park is situated within the Sydney Metropolitan Area, approximately twenty kilometres north of Sydney CBD. Generally, the park comprises the land east of the Sydney Newcastle Expressway, south of the Hawkesbury River, west of Pittwater and north of Mona Vale Road. It also includes Barrenjoey Head on the eastern side of Pittwater. The park falls within the Local Government Area boundaries of Hornsby to the southwest, Ku-ring-gai to the southeast, Warringah to the east of Cowan Creek, and Pittwater to the east.

The study area of Apple Tree Bay precinct is located at the junction of Apple Tree Creek and Cowan Creek, within the Ku-ring-gai Chase National Park.

Figure 1.1 shows the location of Apple Tree Bay study area in the Ku-ring-gai Chase National Park, including roads and tracks.

Figure 1.2 shows the boundary of the study area of Apple Tree Bay, however the relationship of the parklands to the natural bushlands and waterways is a significant visual and environmental catchment area.
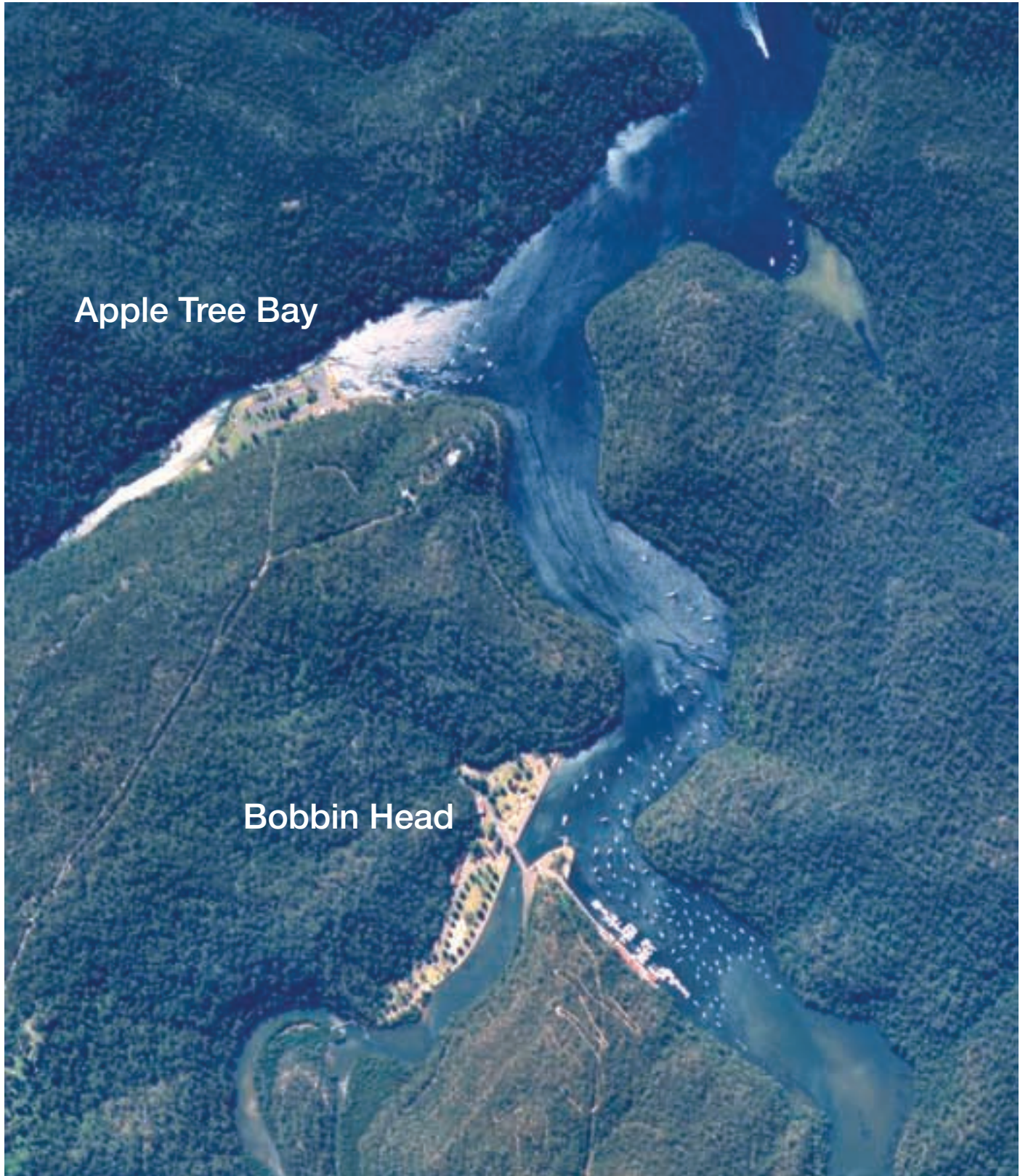
P1. Aerial photograph of Bobbin Head + Apple Tree Bay, undated (source: Land + Property Information - NTS)

1.1   How to use the Masterplan Documents

The Masterplan for Apple Tree Bay is made up of the following components:

- The Vision for Apple Tree Bay - Masterplan Summary 2006
- Volume 2* -   Part 1 Apple Tree Bay Masterplan
                  Part 2 Apple Tree Bay Conservation Management Plan
                  Part 3 Apple Tree Bay Landscape Management Plan
- Volume 3 -   Appendices

* Note: Volume 1 is the Bobbin Head Masterplan, Conservation Management Plan, and Landscape Management Plan.

The Masterplan has been separated into Volumes:

- to assist readers with special interests
- due to the size and nature of each volume
- to facilitate limited reproduction of each part

The Vision for Bobbin Head and Apple Tree Bay - Masterplan Summary 2006
The vision for Apple Tree Bay and Bobbin Head covers the overall vision for the parklands and the relationship of the parklands and recreational use in the wider context of the Ku-ring-gai Chase National Park. The vision includes education, conservation, heritage, cultural importance, tourism, sustainability and management of this scarce natural resource at a Local, Regional, State and National level.

Volume 2 – Part 1 Apple Tree Bay Masterplan
Part 1 – Apple Tree Bay Masterplan: The Masterplan describes the vision, objectives and defines policy to achieve the vision for Apple Tree Bay. The Masterplan summarises the Conservation Management Plan (CMP), Landscape Management Plan (LMP), Recreational Planning and defines timeframes, costings and actions for the implementation of the Masterplan. Therefore, the Masterplan summarises the broad issues of conservation, sustainability, tourism, environment, recreation, park and infrastructure uses, social history, Indigenous and non-Indigenous Aboriginal history and heritage, policy, landscape design and management of the parklands. The Masterplan generally is consistent with the Plan of Management for the Ku-ring-gai Chase National Park, and all other relevant reports listed in the Appendices. The Masterplan is intended to be adopted by an updated Ku-ring-gai Chase National Park Plan of Management within the next four years. The Masterplan also discusses authorship, consultation and methodology.

The Masterplan should be read in conjunction with the Vision for Bobbin Head and Apple Tree Bay, and Volume 3, Appendices.

Volume 2 – Part 2 Apple Tree Bay Conservation Management Plan (CMP)
Part 2 – Apple Tree Bay CMP is a stand-alone document, which provides general historical overview of the natural, Aboriginal and cultural development of the parklands. The conservation significance of Apple Tree Bay is assessed according to the principles of the *Burra Charter* and the *NSW Heritage Office Guidelines*. The CMP provides policy to guide the future development of the parklands, through conservation, adaptive re-use, and new works, to ensure that Apple Tree Bay continues its role as a living cultural precinct within the conserved natural setting. The CMP provides policy for the interpretation of the heritage value of the Apple Tree Bay parklands. The CMP is cross referenced to the Appendix and LMP. The policy provides guidelines for the Masterplan.

Figure 1.2. Existing aerial view with cadastral overlay of Apple Tree Bay c.2004 - NTS

Volume 2 – Part 3 Apple Tree Bay Landscape Management Plan (LMP)

Part 3 – Apple Tree Bay LMP provides the vision for the landscape and visual characteristics for Apple Tree Bay, taking into account the conservation policies developed within the CMP. The LMP defines the existing characteristics of the parklands. The LMP analyses all components of the landscape, including the bushland setting, the environment, landscape elements (soil, topography, built form, trees etc.) and visual characteristics of the site. Opportunities and constraints (issues) include the natural, cultural and landscape heritage. The detail of policy and associated implementation of the landscape design to achieve the Vision are set out in this document. The LMP is cross referenced to all volumes and should be read in conjunction with the CMP and MP. The conclusion provides a summary for the Masterplan.

Volume 3 - Appendices

The Appendices contain all supporting information, specialist consultancy advice, reports, abbreviations and a bibliography.

Summary Submissions Report

This document summarises the masterplan process, including the consultatation that took place, and the recommendations made in respect of the public exhibition of the Draft Masterplan. The recommendations are incorporated into the final Masterplan.

Figure 2.1. Masterplan of Apple Tree Bay - NTS

2.0 The Vision

2.1 The Vision for Apple Tree Bay Parklands in relation to the Ku-ring-gai Chase National Park

Apple Tree Bay will be conserved, enhanced and managed as a primary recreation parkland within the natural landscape of the Ku-ring-gai Chase National Park in accordance with the CMP, LMP and MP. Current and future generations of visitors will be able to picnic and enjoy passive land and water based recreation within this unique landscape. Visitors will learn about the history, significance, sustainability and natural attributes of the precinct and Ku-ring-gai Chase National Park through a series of imaginative designs and interpretation systems.

2.2 The Vision for Apple Tree Bay

Apple Tree Bay will be a naturalistic recreation parkland, set within the bushland of Apple Tree Creek.

The informal recreation areas will be welcoming and comfortable, providing dramatic views of the surrounding hills and waterways. The park will have distinctive features and designs such as picnic areas, an outside sculptural discovery area, a kiosk, interpretation and wayfinding facilities and upgraded amenities.

Apple Tree Bay will continue to provide boat and canoe users with launch facilities for boating and fishing on the Cowan Waters. Enhanced facilities for boat users will be designed sympathetically and will be sustainable with improved safety and security to ensure that the parkland experience is enjoyed by all visitors.

The parklands will integrate seamlessly with the bushlands and the water ways, utilising the natural environment to enhance the user's experience and educate visitors.

P2. Apple Tree Bay from the Foreshore Area, 2006 (source: CM+)

2.3   The Vision for the Track between the Parklands

'Touch the sky, the water, feel the earth and smell the bushlands and waters.'

The proposal to construct a bushland track between Bobbin Head and Apple Tree Bay is a long-term, future project that would require a complete Review of Environmental Factors (REF) and amendment to the Ku-ring-gai Chase National Park Plan of Management.

A new water edge and bushland track, offering pedestrians expansive views of Cowan Waters and Apple Tree Creek, is proposed to link Apple Tree Bay with the recreational precinct of Bobbin Head. This will be one of the most visually appealing tracks in the Ku-ring-gai Chase National Park and Sydney. The track will follow, as closely as possible, a contour path above King Tide level, providing an approximate 2km link between the two premier recreation precincts for pedestrians.

The path may provide visitors with opportunities to stop and contemplate the dramatic waterway and valley, providing glimpses through the eucalypts, and to learn about the flora, fauna and Aboriginal heritage of the area. This track will link to the Bobbin Head Track, Mt Kuring-gai Track (via the Berowra Track) and Birrawanna Track, closing up the missing link in the larger Ku-ring-gai Chase National Park track network. The future Apple Tree Bay to Bobbin Head Track will become a tourist feature of the Ku-ring-gai Chase National Park, offering shade, rest, recreation and general health benefits for park visitors.

The serene beauty of the changing blue waterways will be experienced directly from the tactile, textural pathway, linking the two premier cultural and recreational precincts through the eucalyptus green bushlands, at the place that the sandstone and water meet.

P3. Bushland Track to the Pontoon at Apple Tree Bay, 2006 (source: CM+*)*

3.0 Masterplan Objectives and Outcomes

This Masterplan guides the conservation and future management of Apple Tree Bay. The objectives of the Masterplan as required by Department of Environment and Conservation are to:[1]

Management
- Provide the foundation for integrated management that retains and enhances the significance of the precinct.
- Provide sound planning, design and management guidelines addressing appropriate conservation, use and landscape management.
- Improve park user experiences through safety and improving pedestrian / vehicle access / cyclist and parking within Apple Tree Bay Precinct.

Education
- Raise perceptions of Apple Tree Bay as a special place for visitors and the general community.
- Provide for clear expression of values of Apple Tree Bay in the greater context of Ku-ring-gai Chase National Park and wider park network.

Recreation and Consultation
- Plan to meet recreational / user expectations better through improved facilities and access in a national park context.
- Reflect community views in the development of the plan.
- Review visitor facilities and develop concepts for improved design solutions, including new picnic shelters, park furniture and children's interpretation area.

Conservation
- Develop design plans that capture the natural and cultural heritage of the precinct and interpret these layers through sensitive design solutions.
- For all the buildings, prepare adaptive re-use possibilities that comply with CMP's heritage policies and are functional and accessible.

In addition to the Department of Environment and Conservation requirements, the following subjects are summarised, in the Masterplan, from the details extracted from the Landscape Management Plan and Conservation Management Plan, which guide the management through a *"whole-of-landscape-approach"*:

- Conservation
- Sustainability
- Education
- Tourism
- Nomenclature
- Experience
- Importance
- Contrast
- Integration
- Noise
- Lighting
- *"Whole-of-landscape-approach"*

[1] Tender Brief for Preparation of a Masterplan including: Conservation Management Plans and Landscape Management Plans Bobbin Head & Apple Tree Bay Precincts Ku-ring-gai Chase National Park, 2005; NSW NPWS.

3.1   Conservation

Refer to Volume 2, Part 2 CMP.

In 1894, Ku-ring-gai National Park was Sydney's second national park to be proclaimed, and the first national park to be set aside for conservation purposes specifically. Apple Tree Bay has been a focal point of recreation within Ku-ring-gai Chase National Park. Conservation is a critically important aspect of the Masterplan for Apple Tree Bay.

Objectives
- To develop a design solution that captures the natural and cultural heritage of the precinct and interprets these layers through sensitive design solutions.
- To limit development of the recreational areas to those areas of the National Park already disturbed by clearing and reclamation.
- To maintain a balance between the conservation and recreational needs of the park through careful planning and design.
- To ensure that threatened species of flora and fauna in the precinct and in the National Park continue to be protected.
- To respect and conserve sites, and items of Aboriginal heritage.
- To promote the adaptive re-use and conservation of heritage buildings and other parkland structures.
- To educate visitors about the cultural and natural heritage of Apple Tree Bay (Refer to Appendix 1.1 Flora and Fauna Report).

P4. Historic photograph, view of Apple Tree Bay, undated (source: State Records NSW/ID No. 12932-a012)

3.2 Sustainability

3.2.1 Background
Sustainability improvements are concerned with (at least) the maintenance of and (at best) the improvement of the quality of life within the carrying capacity of supporting ecosystems. The 1992 Australian National Strategy for Ecologically Sustainable Development set out four main tenets of sustainability (The ESD Strategy):[2]

- **The Precautionary Principle**
  Measures to prevent environmental degradation should not be postponed due to lack of full scientific certainty.
- **Intergenerational Equity**
  Resources are left in trust for the benefit of future generations.
- **Conservation and Biological diversity**
  Measures should be undertaken to preserve genetic, species and ecosystem diversity and integrity.
- **Environmental Economic Valuation**
  The true cost of environmental impacts should be factored into the market economy.[3]

Department of Environment and Conservation endorses the National Strategy for Ecologically Sustainable Development to improve sustainability.[4]

3.2.2 Introduction
A sustainable approach to the re-development and improvements associated with Apple Tree Bay is considered a primary focus for the on-going development of the parklands.

Objectives
- Apple Tree Bay's sustainability footprint will improve. The sustainable outcomes will consequently improve the parklands overall footprint on the environment.
- The general public will be informed and educated about sustainability, improvements to the environment, and how sustainability improves the quality of life and biodiversity. Various education and information systems will be employed.
- The National Parks and Wildlife Service will continue to improve sustainability indexing in the future development of the parklands as an on-going process.

3.2.3 Environmental Sustainability
Sustainability informs the Vision for parkland improvements to achieve new best practice standards in design; through research, implementation, management and conservation.

3.2.3.1 General
There is a variety of sustainable approaches that could be employed, generally being integrated and systemic. This Masterplan proposes principles and opportunities, rather than specific outcomes. This approach ensures systems and methodologies are consistent with the parkland and recreational requirements and appropriate and visually interesting. The details of the integrated Environmentally Sustainable Design systems will be carefully designed at detail design stages of the implementation of the Masterplan.

[2] Williamson T, Radford A, Bennetts H, 2003; *Understanding Sustainable Architecture,* Spon Press, London.
[3] *Australian National Strategy for Ecologically Sustainable Development*; 1992.
[4] www.environment.nsw.gov.au

3.2.3.2 Conservation
Refer to Volume 2, Part 2 CMP, Chapter 6.0 for details of conservation policy.

Conservation is an essential principle of sustainability. The following would improve sustainability of the parklands:

Objectives
- Protect and conserve the cultural heritage landscape, natural bushland and water environments.[5]
- Minimise the disturbance to local flora, water ways / systems and fauna.[6]
- Conserve natural bushland and environmental areas.[6]
- Conserve cultural, social and heritage associations, and identify adaptive re-use of elements where possible.[6]
- Maintain and enhance community values associated with the natural and recreational parklands.[6]
- Maintain viability of local ecosystems.[6]
- Conserve and re-use materials on site.
- Plant trees and specify ones that reflect Aboriginal use of the environment, to increase awareness of the natural resource.
- Enhance visitor comfort and experiential levels through intelligent design.
- Reduce waste by developing counter-measures and strategies to disposable thinking and consumption.
- Conserve existing values that are sustainable, and educate visitors about those that are not sustainable.

3.2.3.3 Environment
The following Opportunities would improve the sustainability of the parklands:

Opportunities
- Consider renewable energy sources such as solar power.
- Consider reducing hard surface areas to the minimum.
- Consider using materials that are selected through an approved renewable resource or as having low energy indexing.
- Continue recycling program to reduce paper and waste on site.
- Consider incorporating a water reuse system:
    - For irrigation, fire protection and maintanence.
    - Utilise recycled water for cleaning, irrigation and maintenance.
    - Harvest rainwater for external uses (eg., amenities building, cleaning, wash down, irrigation, etc.).
- Reduce pollution in all systems / ecologies both on the site, and brought to the amenity.
- Improve the parkland landscape sustainably:
    - Reconstruct the foreshore area utilising natural materials.
    - Prepare a construction and environmental management plan to reduce pollution and to improve construction methodologies.
    - Sensibly reuse and / or re-condition existing materials to improve sustainability:
        ~ Re-use shelters and other amenities, adapt for contemporary function and provisions.
        ~ Reuse compacted fill and asphalt, removed from current parking layouts, as fill for new parking and road layouts.

[5] Extract from Ku-ring-gai Chase National Park Plan of Management, 2002.
[6] Extract from Ku-ring-gai Chase National Park Plan of Management, 2002.

Actions
The following Actions should be taken to improve environmental sustainability:

- Environmentally sustainable systems should be visible and carefully designed.
- Reduce the overall energy consumption of the amenity with renewable energy / passive energy resources such as:
  - *Electricity*   Employ passive and renewable energy systems to reduce the reliance on the National Grid system for power.
  - *Potable water*   Reduce the amount of potable water use.
  - *Heating and cooling*   Reduce the need for heating and cooling through alternative passive systems.
  - *Traffic in the park*   Reduce pollution and energy consumption.
  - *Gas*   Ensure that gas use is limited to essential services.
  - *Fire*   Bushland fire protection provisions to limit fire damage/ destruction in, and around, the parklands.
- Convert consumable resources into renewable/reusable resources.
- Reduce the overall environmental impacts (footprints), use renewable sources of materials.
- Clean and treat pollution / waste prior to returning to the natural environment.
- Utilise labour that is cost effective and easily sourced.
- Establish and manage low maintanance landscape techniques.

3.2.3.4 Materials and Finishes
Appropriate and careful selection of use of materials generally improves durability and, consequently, sustainability:

Opportunities
- Consider employing contractors and labour with proven track records in environmentally sensitive construction.
- Consider materials with high durability indexing / performance criteria only.
- Considering incorporating bio-degradable materials where appropriate.
- Consider utilising recyclable and/or waste materials wherever possible.
- Consider undertaking Life Cycle Impact Analysis for all aspects of parkland development.

Actions
- Determine what eco-systems are affected by material use, and assess the material for appropriate use.
- Utilise renewable resources and materials, wherever possible.
- Plant low maintenance native shade trees and endemic plant species.
- Employ labour trained in environmentally sustainable use.
- Ensure materials achieve rating standards (local and international checks to be established prior to designing and specifying and ordering).
- Consider the introduction of native grasses to minimise expanses of maintained exotic grasses.
- Employ best-practice horticultural techniques for the establishment and maintenance of the landscape.
- Create landscape that is rich in biodiversity.
- Take into account the need to protect and enhance the heritage values of the place where appropriate, adopt a schedule of finishes to achieve material consistency from the Department of Environment and Conservation (NSW) Parks and Wildlife Division, 2006, Facilities Planning, Parks Facilities Manual.

3.2.3.5 Public Awareness in Appreciating Sustainability

Education is an important aspect in appreciating sustainability. Values that society treasures and considers sustainable often create environmental stress and lower sustainability indexing. As cultural values change with regard to the environment, and as we learn more about the natural environment, education is central in modifying behaviour and attitudes in Apple Tree Bay. The following could be achieved through signage and website information:

Opportunities
- Ensure that the parklands visibly demonstrate the sustainable approach.
- Consider educating the community about petrol use and limit the number of traffic movements to reduce pollution (air).
- Consider establishing measurement and credibility systems for visitor, stakeholder and management endorsement.
- Consider management techniques to ensure that stakeholders and lessees employ Environmentally Sustainable Design requirements.
- Consider techniques assist the community in understanding their role in sustainability.
- Educate visitors about the role of ESD in the general environment, in the parklands and at their homes.
- Educate the public about health and safety benefits associated with ESD and associated principles.
- Educate the public about cultural, social and heritage associations and identify adaptive re-use of elements to improve community values about the environment.
- Provide educational policy to visitors in relation to consumptive responsibilities such as reducing disposable materials (lunch packs, picnic cups, aluminium cans) to assist them change their values.
- Provide education about waste management techniques, to educate visitors.

3.2.3.6 Utilise the Services of Specialists in Sustainability
- Develop workshop environments and inter-relationships with other government and non-government organisations and cross-department coordination to assist in the development of a sustainable strategy for the parklands.
- Encourage peer and specialist review of processes at key stages of work to achieve best-practice standards.
- Encourage community review of processes and outcomes to educate and achieve general endorsement of ESD strategies.

3.2.3.7 Economic and Management Sustainability

Economic sustainability of the parklands is an essential component of the management of the parkland.

Opportunities
- Determine life cycle costs.
- Design for low-imported energy use and lower running costs.
- Access grants for research and development, especially in relation to new technologies related to ESD.

Actions
- Recognise management and contractor expertise in cost effective design solutions.
- Employ effective cost planning controls to improve sustainability.
- Implement National Parks and Wildlife Service Asset Maintenance System (AMS).

3.1.3.8 A Sustainable Approach to Construction

Prior to construction commencing, the preparation of a Review of Environmental Factors is required to assess the impacts of activities in reserves and those impacts on the natural and cultural heritage. The National Parks and Wildlife Services have developed the "Proponents Guidelines for the Review of Environmental Factors" for activities on land reserved under the National Parks and Wildlife Act 1974 which require assessment and approval from the National Parks and Wildlife Service. These guidelines are supported by a "Construction Assessment and Approvals Procedure" document. This document contains objectives to ensure construction procedures are carried out in accordance with the Environmental Planning and Assessment (EP&A) Act and the National Parks and Wildlife Act 1974. Including, all State (and National) building laws and to ensure that all technical and environmental protection requirements are achieved prior to and during construction.

A sustainable approach to construction includes; employing effective cost planning and construction controls, employing localised and specialist labour who are trained in Environmentally Sustainable Methodologies and employing management techniques that are safe and comply with all Occupational Health and Safety Act requirements in a sustainable manner.

3.3   Education

Refer to Volume 3, Appendix 1.5 Recreational Planning Report.

Education is an important aspect of conservation. It ensures that values and information may be passed onto future generations while developing an appreciation of the natural and cultural environment [7]. Education assists in developing values that will enhance understanding of the natural and cultural heritage, sustainability and experience of the place.

Objectives
- To educate the general public about the importance of National Parks.
- To educate visitors about the indigenous and non-indigenous cultural and natural heritage of Apple Tree Bay.
- To educate visitors about the natural heritage of Apple Tree Bay and its setting.
- To develop an interpretation strategy that both educates and enhances the experience of the visitor.

[7] KCNP, Plan of Management, 2002 and Towards 2020 – New South Wales Tourism Masterplan; 2003; Tourism NSW

3.4 Tourism

The first references made to Apple Tree Bay appear in tourist guides from the late 1890s and imply that the area was already well known by then. The area has remained a popular visitor destination.

The potential for future growth in natural and cultural tourism is substantial. It is, therefore, important for park managers to understand future trends in visitor use of parks. This will be critical for the adaptive management of the park and for building the capacity to manage changes and shifts in visitation patterns and park usage.[8]

Towards 2020[9] the 'Nature in Tourism' plan will provide the strategic principles and directions for the development, delivery and management of nature based tourism in NSW.[10] Department of Environment and Conservation's Living Parks document builds on the Towards 2020 – New South Wales Tourism Masterplan which states the NSW Government's commitment to the future of tourism. The Tourism Masterplan is a whole-of-government strategy that identifies issues likely to confront the state as a visitor destination and outlines how the NSW Government will work with the tourism industry to position the state to achieve its tourism potential.

Branch Visitation Management Plans are available for each field branch of the Department of Environment and Conservation. These plans provide a framework for visitor management and guide recreational opportunities that balance natural, cultural and community values.

Department of Environment and Conservation's Living Parks Action Plan[11] recommends actions for visitation planning. Reference to the detail of these outcomes is contained in Living Parks which includes the following general outcomes:

- Visitation planning and management to conserve park values and that are coordinated and integrated.
- Commercial uses associated with visitor use are consistent with park management objectives.
- Facilities, infrastructure and services are designed to be environmentally sustainable.
- Visitors are better informed of the opportunities offered within the parks and information provided which enhances visitor experiences, understanding and appreciation.
- The provision of a range of opportunities for the visitors to enjoy, appreciate and learn about natural and cultural heritage of NSW.
- The provision of facilities necessary to deliver, present and protect quality visitor experiences.
- Partnerships formed with the private, non-profit and public sectors provide benefits to all partners, enhance achievement of park conservation objectives, and further develop trust and understanding between partners.
- Partnership opportunities that recognise that needs and aspirations of Aboriginal people and communities, while facilitating the appreciation of Aboriginal culture.
- Research partnerships that lead to improved visitation management through improved knowledge.

Objectives
- To promote Apple Tree Bay as a special destination for visitors and the general community.
- To provide a premier natural and cultural tourism experience at Apple Tree Bay.
- To provide facilities catering to tourists, including bus parking, amenities, food and beverage outlets and information.

[8] Department of Environment and Conservation (NSW), 2006; *Living Parks – A Sustainable Visitation Strategy*, Department of Environment and Conservation.
[9+10] Tourism New South Wales, 2003; *Towards 2020 - New South Wales Tourism Masterplan*, Tourism New South Wales.
[11] Department of Environment and Conservation (NSW), 2006; *Living Parks – A Sustainable Visitation Strategy*, Department of Environment and Conservation.

3.5   Nomenclature

The name of a place is important in acknowledging the origins and processes, people and events associated with a place. It is important that place names increase user awareness of the place. The policy for nomenclature is:

Objectives
- To conserve and interpret the established names of various elements.
- To ensure that any currently un-named or inappropriately named areas or amenities are correctly named.
- To promote the park through naming ceremonies, plaques and information systems.

3.6   Recreation

Refer to Volume 3, Appendix 1.5 Recreational Planning Report.

Increasing urbanisation and population place on-going stresses on the environment and parklands to provide a variety of outdoor recreational opportunities. Both the grounds and the waterways of the lower Hawkesbury River, including Apple Tree Bay are major features of Ku-ring-gai Chase National Park. Apple Tree Bay is currently highly utilised for boating activities.

Several initiatives are recommended for improving the recreational experience of Apple Tree Bay. These include upgrades to the landscape to improve picnicking, views across Apple Tree Bay and an improved foreshore. Improvements should include new shelters, barbeque facilities, furniture, ammenities buildings and cafe facilities. The introduction of interpretation or discovery areas for children, with improved safety for park users through traffic management and consolidated parking and road layouts are necessary. Sustainable parklands with improved security, education, regulatory and wayfinding systems would also improve the recreational experience of Apple Tree Bay.

Objectives:
- To improve and update the facilities within Apple Tree Bay to cater for the variety of recreational needs of the community, including picnicking, walking, education and other passive recreation activities.
- To achieve a balance between recreation and conservation so that resources will not be depleted at the expense of recreation.
- To provide a safe environment for recreation.

P5. Apple Tree Creek from the bushland, 2006 (source: CM⁺)

4.0 Visual and Environmental Objectives

Refer to Volume 2, Part 3 LMP.

Apple Tree Bay parklands are flat. This flat landscape, along with ashphalt parking areas, native grasses, seawalls, colours, textures and built structures contrast with the steep topographic forms of the natural bushlands. Native trees, the informal foreshore and informal parkland layout assist in integrating the parklands into the dominant natural bushland valley and waterways. The recreation activities are also in contrast with the peaceful surroundings. The visual and aesthetic policy proposes to balance contrasts and integration in a sympathetic manner.

Objectives
- To improve the amenity of Apple Tree Bay by enhancing the water front experience for passive recreational use.
- To improve views and pedestrian connectivity to the water's edge (Refer to Volume 2, Part 2 LMP for detailed information).
- To minimise visually obtrusive elements such as signage, fencing and services through carefully integrated design, which is to be consistent with the park setting.
- To minimise the visual dominance of parking on the foreshore and in the parklands.
- To minimise the visual dominance of road and car park surfaces.
- To provide wear resistant surfaces for pedestrian desire lines, and to prevent grass wear from traffic.
- To improve the landscape design and maintenance.

4.1 Contrast

Refer to Volume 2, Part 3 LMP for additional information.

The contrast between Apple Tree Bay and its surroundings is evident on both macro and micro scales, as demonstrated in landform, colour, texture and spatial sequence.

Objective
- To conserve the contrast in the landscape so as to define the cultural landscape against the natural setting.
- To emphasise the boundary of the recreation areas with that of the bushland in a visible yet sympathetic manner.

4.2 Integration

Refer to Volume 2, Part 3 LMP for additional information.

Apple Tree Bay parklands are located within the larger National Park bushland. Parkland integration with the surrounding natural bushlands and waterways is proposed in this Masterplan. Integration of the parkland elements (landscape and built elements) will assist and visually integrate the man-made recreational parklands into the natural environment. The Landscape Management Plan and concept design for the parklands guide parkland development to achieve visual integration.

Objective
- To embrace an integrated approach to all aspects of design.
- To ensure that Apple Tree Bay integrates with its surrounding natural environment including but not limited to landscape design, road network and circulation and material selection.
- To balance active recreation needs with tranquility and serenity of the parklands.
- To consider the design and improvement to recreational facilities in the context of other facilities in the National Park and the surrounding natural environment.
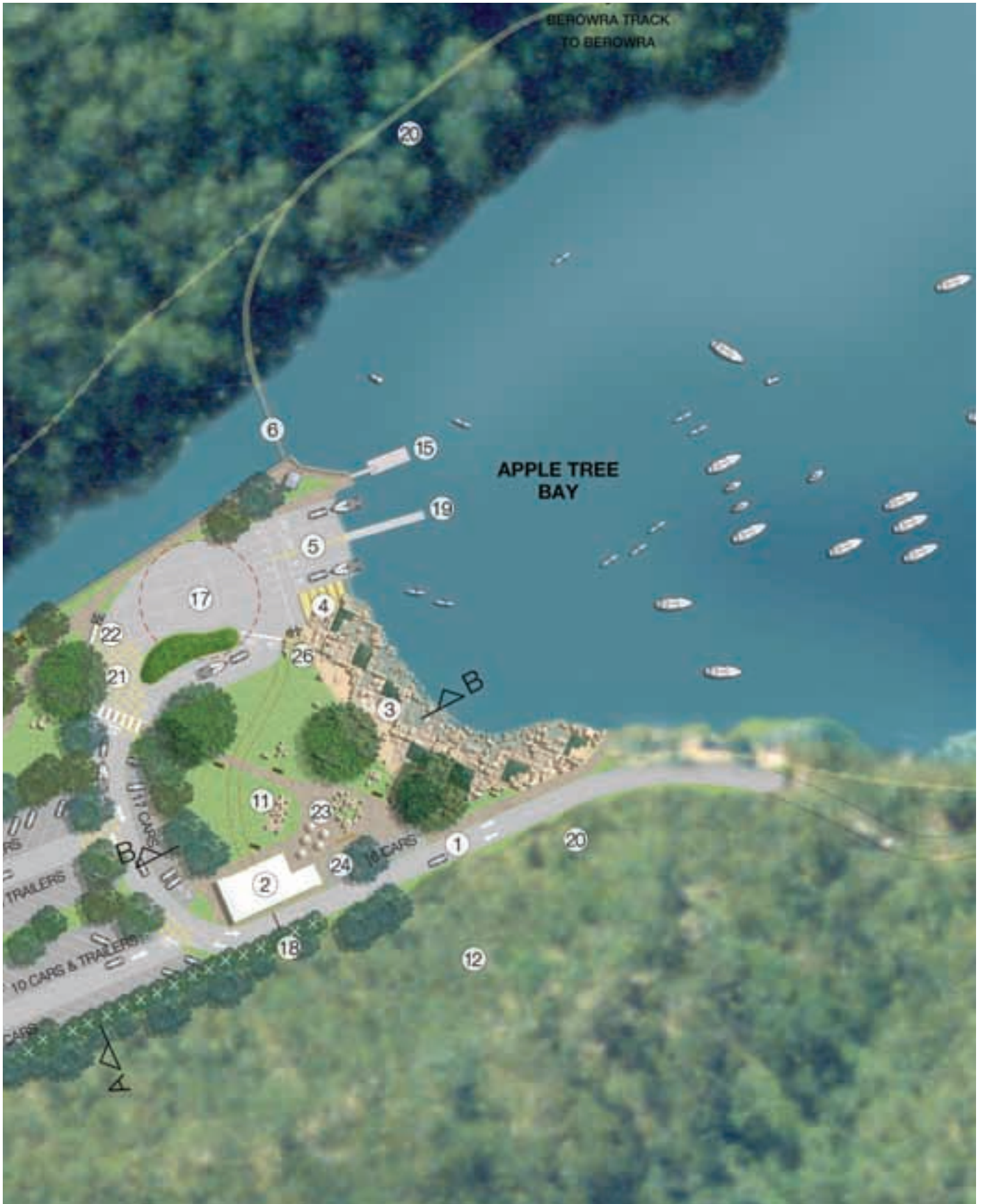
Figure 4.1. Detail of Foreshore Area - NTS (Refer to Figure 2.1 Masterplan of Apple Tree Bay for details of numbered points.)

4.3 Noise

Apple Tree Bay is subject to various forms of noise pollution. Noise invades the serenity of its environment. Noise pollution is principally generated by traffic (moving through the parklands), boating, active recreational pursuits, and is generally inconsistent with the environment:

Objectives
- To ensure that the road and landscape design assist in reducing noise pollution.
- To identify noise sources and to work to reduce the impact of the noise sources wherever possible.
- To balance active recreation needs with the tranquil parkland requirements and to consider noise mitigation measures where feasible.
- To educate the public about noise and how to minimize noise sources.
- To plant vegetation that attracts bird life.

4.4 Lighting

An integrated lighting strategy is to be considered in the future to ensure a balance between utility / recreational needs and the requirements of the natural environment.

Objectives
- To provide lighting to areas only where access is permitted after dark.
- To reduce light spill and minimise the effects of artificial lighting on surrounding wildlife through the use of movement sensor lighting/red lighting.
- To ensure minimal light pollution in the surrounding night sky.
- Lighting provisions to minimise impact on the natural character and experience of the Apple Tree Bay setting.
- Consider impact of lighting to structures - generally provide recessive/subtle light sources where required for function, safety or security.
- All lighting should be warm in colour and be used in fittings that emit no light above the horizontal plane.
- Lighting should be concentrated to access and use areas required for night visitor use only.

For further information under this section refer to the Parks Facilities Manual, Volume B, Facilities Catalogue, Section 8.0 Lighting.

4.5 Whole-of-Landscape

Refer to Volume 3, Part 3 LMP for additional information.

The Whole of Landscape Approach is a holistic management strategy that requires that all actions are considered as impacting or influencing all other actions, and, therefore, an integrated approach is required to ensure that the whole landscape is considered at all times.

Objectives
- To ensure that no single issue dominates another.
- To strive for a balance in all aspects of management to ensure that the whole of landscape is considered at all times.
- To ensure that management is holistic and balanced in its approach.
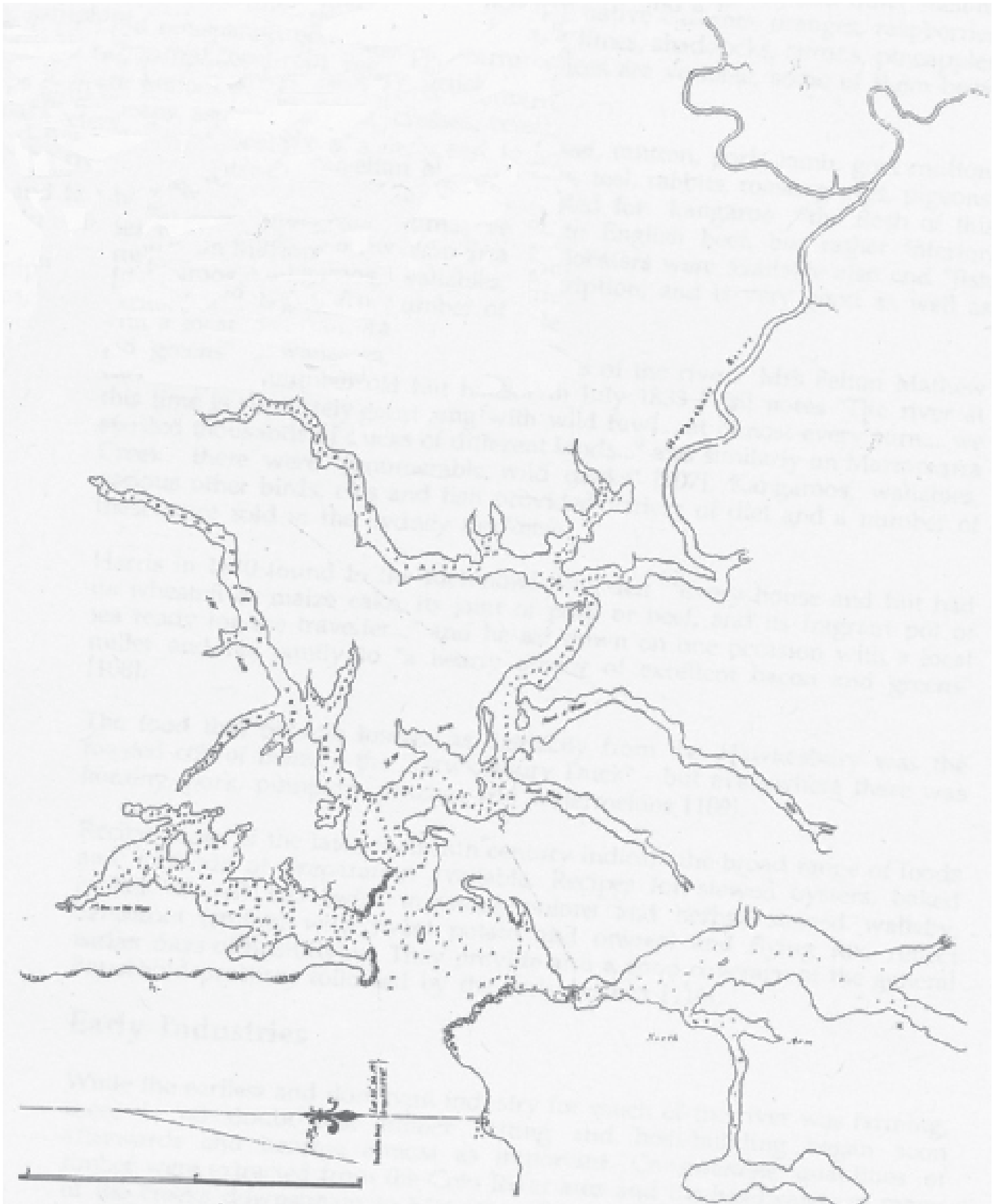
Figure 5.1: Chart of Broken Bay and the Hawkesbury River as drawn by John Hunter 1789 (Source: Powell J & Banks L, 1990; Hawkesbury River History, p.24)

P6. Portrait of Eccleston Frederick Du Faur, undated (source: NPWS Archives)

5.0 Summary Conservation Management Plan

Refer to Volume 2, Part 2 CMP.

5.1   Historic Overview

The eastern coast of Australia was formed approximately 200-250 million years ago. The Dry Schlerophyll Forest and undergrowth vegetation and associated fauna species seen in the Ku-ring-gai Chase National Park evolved continuously from that period. Archaeological finds located within the Apple Tree Bay area attest to the long-term Aboriginal occupation of the region. The Aboriginal people who are known to have inhabited Apple Tree Bay area were the Guringai tribe.

European occupation of the region began when Governor Phillip first explored Broken Bay and on 5 March 1788, he camped at Resolute Bay near West Head. The waters of the Hawkesbury, including Cowan Creek were first mapped by John Hunter in 1789. The Cowan Creek area was initially used for logging, smuggling, escaping convicts, trading and transport. The tpographic setting of the area limited development such as farming.

Captivated by the natural beauty of valley and waters, Eccleston Du Faur, a local resident, successfully lobbied for the establishment of Ku-ring-gai Chase National Park in 1894. The Park remained in Trust management until 1967 when it was gazetted under the National Parks and Wildlife Act and fell under the management of National Parks and Wildlife Services of New South Wales.

Continued parkland maintenance and improvements are necessary and will assist in the economic sustainability of Apple Tree Bay. This area is to be managed in accordance with the Apple Tree Bay Conservation Management Plan in order to conserve its heritage significance.

For over 100 years Apple Tree Bay has been used for outdoor recreational pursuits including picnicking, fishing, swimming, camping and boating. Initially, the area was known as a popular bathing spot. Following many years of pressure by the Ku-ring-gai Chase Trust, the land along the southern foreshore of Apple Tree Creek was reclaimed to form the recreation area as it exists today. It is from the 1950s period that Apple Tree Bay was developed as an overflow area to accommodate the increased visitation to Bobbin Head. Although historically used for a variety of recreational activities, Apple Tree Bay is today predominantly used as a boat launching and carparking site.

5.2   Summary Statement of Significance

Refer to Volume 2, Part 2 CMP, Chapter 4.

Apple Tree Bay, Ku-ring-gai Chase National Park is a place of cultural significance for historic, aesthetic, scientific/research and social values at a local level. Apple Tree Bay is located within Ku-ring-gai Chase National Park an area of high natural significance at state level. The selection of the name, Ku-ring-gai Chase National Park, is dedicated to the local Aboriginal language groups that occupied the land.

The place has high historic significance for its associations with Ku-ring-gai Chase National Park, gazetted in 1894 as the second national park in NSW and the first national park devoted to nature conservation. Ku-ring-gai Chase Trust administered the conservation area from 1894 to 1967. National Parks and Wildlife continue to administer the place from 1967 to the present (2006).

Apple Tree Bay has high aesthetic significance associated with the views, vistas and scenic qualities of a secluded recreational area set within an inlet of Cowan Creek and surrounded by the bushland slopes of Ku-ring-gai Chase National Park.

Apple Tree Bay has high social significance at the local level for its leisure and recreational heritage, including water-based activities. Apple Tree Bay attracts visitors each year from surrounding residential areas and the wider Sydney region. Apple Tree Bay provides an open

space recreational area that supports a wide variety of recreational activities. The place has strong associations with nature conservation.

Apple Tree Bay has moderate historic significance as a secondary recreational area closely associated with and related to with Bobbin Head, the principal pleasure ground in the National Park.

5.3   Natural Heritage Significance

Refer to Volume 3, Appendix 1.1 Flora and Fauna for a detail description of the natural bio-diversity and species near Apple Tree Bay.

Apple Tree Bay supports habitats of threatened species, located on land and in the waters. The natural ecosystems associated with the mud flats, woodlands and sandstone geology have natural, scientific and research value. The natural environment of Apple Tree Bay is therefore significant to future generations.

Opportunities
- Protect and conserve the natural heritage of Apple Tree Bay.
- Educate visitors about the natural heritage significance of Apple Tree Bay.
- Market and promote the environmental aspects of the National Park.

Actions
- Protect and conserve.
- Identify limits of the recreation parklands and do not disturb the neighboring natural bushlands and waterways without a REF.
- Reduce pollution impacts such as noise, air, waste and water pollution.

5.4   Aboriginal Cultural Significance

Refer to Volume 3, Appendix 1.2 Aboriginal Research and Analysis Report for detailed information on Aboriginal Significance.

Apple Tree Bay and the surrounding areas within Ku-ring-gai Chase National Park have important cultural significance (regardless of the site-specific archaeology), as the Aboriginal community were traditional inhabitants and custodians of the area.

The selection of the name, Ku-ring-gai Chase National Park, was a dedication to the local Aboriginal language groups that occupied the land.

Opportunities
- Interpret Aboriginal cultural significance and sensitivities of the area.

Actions
- Protect and conserve culturally significant areas.
- Information and interpretation panels to provide visitors with information on cultural heritage of the Aboriginal Guringai language group.
- Department of Environment and Conservation to consult with the MLALC in the further development of the Masterplan and associated works at key times.

5.4.1 Archaeological
No Aboriginal archaeological relics and sites are located in Apple Tree Bay. Nevertheless, numerous archaeological sites are in close proximity to the parklands and have scientific and cultural significance to the Aboriginal community. Relevant and appropriate policy for the conservation, protection and education of visitors to these archeological areas of interest are necessary.

Opportunities
- Educate visitors about Aboriginal Archaeological Significance and sensitivities.

Actions
- Protect and withhold public access to archaeological sites subject to further studies at each site.
- Protect and conserve archaeological sites in or at surrounding areas, on tracks near roads, etc.
- Information and heritage panels to provide visitors with information regarding the cultural heritage of the Guringai language group.
- Appropriate care should be taken during any excavation required for new works in previously undisturbed sites.
- Record and watching briefs are required.
- A comprehensive archaeological survey / assessment of all areas to be affected by the construction / upgrading of tracks is to be undertaken before works commence.

All archaeological works are to be undertaken in accordace with the required approval process under the Heritage Act and the NSW National Parks and Wildlife Act.

Refer to Volume 2, Part 2 CMP, Policy 6.8 and 6.9.

5.5   European Cultural Significance

Gazetted in 1894 as the second national park in NSW and the first national park devoted to nature conservation, the Ku-ring-gai Chase National Park is a significant conservation area.

Apple Tree Bay has social, aesthetic and historical significance. As an entry point to the natural bushland surroundings of the Ku-ring-gai Chase National Park (via walking tracks), it is an important parkland environment.

Opportunities
- Educate visitors about European Cultural Significance of Apple Tree Bay and the National Park.
- Promote further studies into the social significance of the parklands.

Actions
- Protect, enhance and conserve the European Cultural landscape.
- Provide a suitable location for photographic, map and masterplanning display.
- Information and heritage panels to provide visitors with information regarding the history and social heritage of Apple Tree Bay.

5.5.1 Archaeological
Apple Tree Bay has non-indigenous archaeological potential associated with buildings, such as the stockyard, structures and facilities associated with the bathing history of the area, and former bridges that had to be continually replaced due to use and flood damage.

Opportunities
- Interpretation should be considered for areas with archaeological potential, in particular, former stockyards, facilities associated with the bathing history, and former bridges.
- Educate visitors about European archaeological significance of artifacts within Apple Tree Bay and the Ku-ring-gai Chase National Park.

Actions
- Protect and conserve European Artifacts in accordance with the relevant policy and Acts.
- Appropriate care should be taken during any excavation required for new works.
- Record and watching briefs are required.
- Any archaeological work to be undertaken in accordance with the requried approval process under the Heritage Act and NSW Parks and Wildlife Act.

Refer to Volume 2, Part 2 CMP, Policy 6.8 and 6.9.
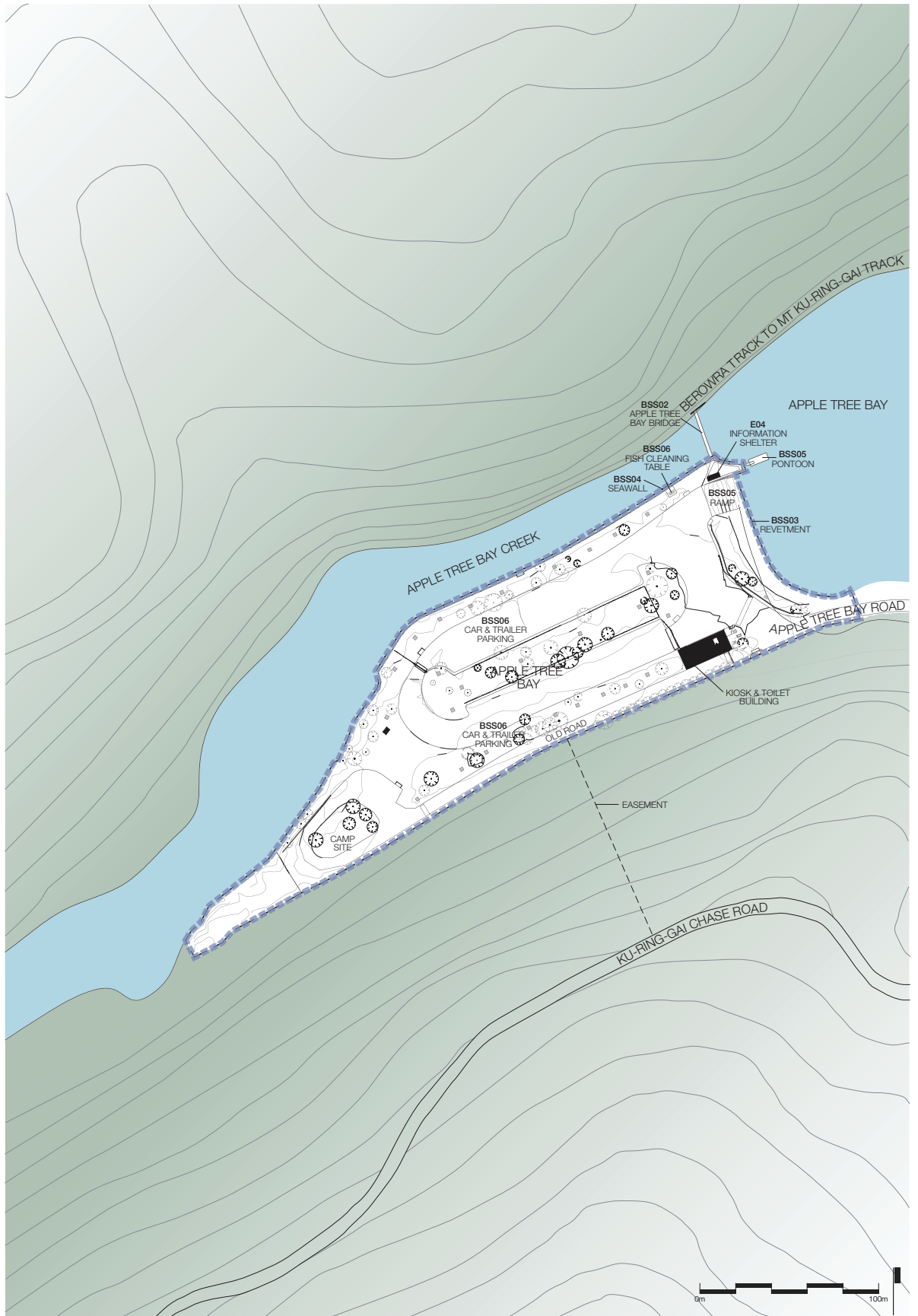
Figure 5.2. Plan of building sites at Apple Tree Bay - NTS

5.5.2 Landscape History

Apple Tree Bay was reclaimed with fill on existing mud flats between 1955 and 1962 to provide additional recreational parklands. Today, the park is generally used as a parking area for boat trailers and cars and there has been an increasingly trend for the parklands to be over-utilized for boat launching facilities. The parklands at Apple Tree Bay are currently not regarded as a desirable destination for other passive recreation.

Native tree and shrub planting is generally located around the perimeter of the site and between roadways and parking areas. Boat launching facilities and amenities are concentrated along the eastern side of the park. The landscape design is informal.

Refer to Volume 2, Part 2 CMP, Policy 6.4.

5.5.3 Buildings: Significance and Opportunities and Actions for Adaptive Reuse

Refer to Volume 2, Part 2 CMP, Chapter 4.5 for information regarding significance.

Reference should be made to the CMP for detail requirements for conservation or adaptive reuse. The CMP is the primary document for resolution, were conflict in meaning or interpretations to arise between Volumes.

5.5.3.1 Kiosk, Garage and Amenities Building

There is currently only one multi-function building in Apple Tree Bay. The continued use and upgrade of the building is important for the park's function and sustainability.

The composite Kiosk, Garage and amenities block (all housed in 'The Kiosk'), designed by architects, RC Smith & Associates and constructed in 1963, has aesthetic heritage significance. It was designed in the Late-Twentieth Century Sydney Regional style. The architectural firm later designed the nearby National Parks & Wildlife Regional Headquarters at Apple Tree Flats and the Gibberagong Field Study Centre at Bobbin Head which belongs to the same style. The Kiosk is a representative example of the architectural firm's style and is a lesser work compared to the Headquarters. The building was modified, possibly in the 1980s, to accommodate the National Parks and Wildlife Service Emergency Boat. Housing this boat required unsympathetic modifications to the façade.

Opportunities
- The building has historic significance associated with its function as a refreshment and amenities provider.
- Opportunities exist for extensions and sympathetic modifications or partial removal of the existing building to improve internal operations.
- There is an opportunity to restore original elevations of this building when requirements for boat storage facility change.

Actions
- Upgrade amenities and accessibility provisions to Disability Discrimination Act compliance.
- Any modifications to the building must comply to Building Code of Australia requirements.
- Improve and restore front elevation of the building.
- Upgrade kitchen facilities in kiosk to comply with relevant health and safety standards.
- Re-open café / refreshment facilities.
- Provide interpretation, wayfinding and education facilities.
- Provide external lighting.
- Provide new fire protection provisions as required.
- Overhead cables that run from Birrawanna Track to the back of the building to be relocated underground where practical.
- Improve security provisions associated with the building and surrounding landscape.
- Ensure National Parks and Wildlife Service boat access to the ramp is possible.

Refer to Volume 2, Part 2 CMP, Policy 6.4.18 and 6.4.19.

5.5.3.2 Apple Tree Creek Bridge

The footbridge that crosses Apple Tree Creek has little heritage significance. It currently forms part of the Berowra Track leading to the Mt. Kuring-gai Track and is constructed of steel frame on concrete piles with timber treads. This bridge replaced earlier bridges that were associated with bathing in the area but were destroyed by floods. The bridge is currently located in a pedestrian desire line across the boat ramp, which creates a safety conflict with launching and vehicle reversing operations.

Opportunities
- To improve safety and viewing features of the bridge.
- Interpret former bridge locations and structures.

Actions
- Relocate the bridge in the future in a new location that improves safety, especially in relation to the boat launch area.
- Extend the tracks and paths to the located bridge.
- Check safety provisions, especially for pedestrians and cyclists.
- Maintain balustrades and finishes generally.
- Improve safety provisions at the boat launch area to restrict pedestrians crossing boat launch area.

5.5.3.3 Fish Cleaning Bench

The table-height sandstone bench near the mouth of the creek has little heritage significance.

Opportunities
- To increase and improve fish cleaning facilities.

Actions
- Make the facility Disability Discrimination Act compliant.
- Install pollution control devices.
- Relocate facilities to improve desire lines and to upgrade.

5.5.3.4 Barbeque Shelters

Barbeque shelters are located at the southwestern end of the park. These shelters have little heritage significance. Facilities include two gas-operated barbeques.

Refer to Volume 2, Part 2 CMP, Policy 6.4.20.

Opportunities
- To replace shelters, re-use existing materials
- To upgrade and increase barbeque facilities.
- To increase the number of shelters, subject to demand.

Actions
- Make the facility Disability Discrimination Act compliant.
- Add water source to cluster of barbeque shelters.
- Pollution control devices to be installed.
- Option 1 - upgrade, re-utilise materials where possible.
- Option 2 - preferably replace with new contemporary type facilities[13].
- Relocate facilities to suit new landscape design proposal.

5.5.3.5 Information Station

The information station is located south of the footbridge, providing information associated with the Berowra Track. This structure has little heritage significance.

Opportunities
- Improve and update information to include heritage, natural and cultural information.

Actions
- To relocate the structure within the kiosk and outdoor café area.
- Location of this structure to minimise interruption to views along creek.

5.6   Policies

Refer to Volume 2, Part 2 CMP.

The purpose of the CMP is to provide policy for the redevelopment, conservation, adaptation, care, maintenance and long-term use of Apple Tree Bay so that its cultural significance is retained and enhanced. Some of the main guidelines are outlined below:

5.6.1   Built Form and development
The CMP guides all new built form and development within Apple Tree Bay. All alterations and new work should respect the historical nature of Apple Tree Bay and should not visually dominate or be incompatible in character. New building work should be subservient to the landscape character of the place.

Refer to Volume 2, Part 2 CMP, Policy 6.3.11-6.3.16.

5.6.2   Natural Environment
The CMP defines polices to guide the conservation and interpretation of flora and fauna within Apple Tree Bay. It also identifies potential for contribution and enhancement of habitats while guiding access through the natural environment.

Refer to Volume 2, Part 2 CMP, Policy 6.6.

5.6.3   Aboriginal Culture
The CMP provides policies to guide the interpretation and conservation of Aboriginal archaeological sites.

Refer to Volume 2, Part 2 CMP, Policy 6.7 and 6.8.

5.6.4   Cultural Environment
The CMP provides policies to interpret, conserve and reinforce the passive recreational character, informal native landscape, and views to and from Apple Tree Bay.

The historical significance of the seawalls are recognised and are to be maintained and conserved. The association with boating is culturally significant to the place and should also be retained.

Refer to Volume 2, Part 2 CMP, Policy 6.3.

LEGEND

— — SITE BOUNDARY

━━ ROAD

······· WALKING TRACK

▬ ▬ FERRY ROUTE

Figure 5.3 Aerial plan of Tracks, Apple Tree Bay - NTS

5.6.4 Tracks

The planning of the walking track requires minimising the overall impact of the track on the natural environment. New track proposals are regarded as future works.

5.6.4.1 Bobbin Head to Apple Tree Bay Track

A new feature and scenic track between Apple Tree Bay and Bobbin Head is proposed to link existing tracks and provide an opportunity for pedestrian connection between the two recreational precincts. It is unlikely that the whole track would be accessible for mobility impaired persons.

Opportunities
- Include wayfinding, information, education and heritage interpretation panels.
- Provide seating and stopping areas at feature areas.
- A boardwalk and bridging structure may be required in some sections due to the topographic forms.

Actions
- A Review of Environmental Factors (REF) would be required for this future proposal. This would include assessments of impacts on flora, fauna, Aboriginal Heritage, general environmental and other planning and safety issues.

Refer to Volume 2, Part 2 CMP, Policy 6.7, 6.8, 6.4.15 and 6.4.16.

Figure 6.1. Apple Tree Bay landscape design for 2006 Masterplan - NTS (Refer to Figure 2.1 Masterplan of Apple Tree Bay for details of the legend.

6.0 Summary Landscape Management Plan

Refer to Volume 2, Part 3 LMP for details; the following is a summary only.

The Landscape Management Plan was developed to identify, direct and achieve long term conservation and landscape management outcomes for Apple Tree Bay, based on research and analysis. This in turn gave rise to opportunities, giving directions to the future uses for the park while protecting significance, and results in coordinated landscape planning principles and detail design guidelines for the parklands.

6.1   Analysis Summary

Refer to Volume 2, Part 3 LMP Chapter 4.0 for detail analysis of Apple Tree Bay as follows:

Topography and Geology
Apple Tree Bay is situated at the base of a valley and has a relatively flat profile, contrasting with the surrounding relief. It is reclaimed land made up of imported fill and contained by a seawall along part of the northern waterfront.

Soils
Apple Tree Bay is formed on in-filled estuarine bays. The surface soils are compacted and impermeable. There is evidence of significant soil acidity and nutrient deficiencies in the park.

Hydrology and Drainage
The land generally drains away from the natural edges of the site towards the foreshore areas.

Microclimate
The majority of the site is an open, exposed environment with little shelter or shade. The steep slopes and vegetation to the rear of the site provide little shade relief within the park due to their northerly aspect.

Flora and Fauna
A combination of native and endemic tree species exist in Apple Tree Bay parklands. Naturally occurring endemic vegetation occurs on the steep slopes at the periphery of the site. No register of threatened flora or fauna species has been recorded on site.

Heritage
Apple Tree Bay is socially significant as a popular recreational destination. The Conservation Management Plan provides detailed information on the European heritage of Apple Tree Bay. There is currently no known Aboriginal archeology within the study area boundary, nor interpretation of Apple Tree Bay's Aboriginal significance.

Recreation and Visitor Facilities
Visitation numbers have increased dramatically in recent years, placing additional demand on facilities.

Volume 3, Appendix 1.5 Recreational Planning Report Section 5 summarises some of the key recommendations for recreation especially improved walking, picnicking, fishing and passive recreational use to be balanced with current boating and active recreation. The park is well-known for its tranquillity and views.

Access, Circulation and Parking
The majority of visitors to Apple Tree Bay arrive by car. Conflicts between pedestrians and vehicles occur at the boat launching ramp. Safety and security of the parklands require improvement.

Landscape Character and Visual Quality
Apple Tree Bay has a relatively restricted visual catchment defined by the surrounding ridgelines within the National Park. Views from and towards the water are an important aspect of Apple Tree Bay's attraction and appeal. There are six dominant character zones in Apple Tree Bay, the most dominant of which is a flat, open, asphalted area occupied by carparking.

6.2 Opportunities

The LMP analysis of the existing park leads to an understanding of the opportunities and constraints which guide future planning. Key opportunities are:

- Improve the amenity of the waterfront areas by reducing the hard surfacing and providing greater shelter and shade.
- Concentrate the car parking to the rear of the site, thereby reducing its impact and providing greater parkland area at the waterfront.
- Reduce pedestrian-vehicular conflicts in the boat launching area with traffic management and enforcement systems.
- Enhance the sense of arrival into the precinct.
- Upgrade the existing kiosk building and establish a new kiosk facility with outdoor café area.
- Improve the setting of the existing building and the foreshore.
- Provide a new walking track linking Apple Tree Bay to Bobbin Head.
- Provide greater interpretation and educational awareness of the cultural and natural values of the park and environs.
- Improve the condition and vigour of park vegetation by improving soils and managing vegetation.
- Improve sustainablility provisions.

6.3   Management Actions

This Chapter outlines specific management and planning actions for Apple Tree Bay. These actions are supported by design principles that inform the approach to implementation to ensure a coordinated, consistent design is achieved for Apple Tree Bay. Design principles should also be used as a general reference in relation to all future planning or management activities affecting the site.

Refer to Volume 2, Part 3 LMP, Chapter 6.0 for Principles and Actions.

6.3.1 Conservation

European Heritage
From the late nineteenth century, Apple Tree Bay has been used as a recreational area, developing as a secondary recreational area to the nearby Bobbin Head, the principal 'pleasureground' in the National Park. Although there are no significant historical relics in the site, there is potential to provide interpretation on past recreational usage of the site.

Aboriginal Heritage
Ku-ring-gai Chase National Park contains extensive evidence of Aboriginal occupation. Management should aim to protect archaeological sites and interpret Aboriginal Heritage in a way that instils interest and promotes an appreciation of Aboriginal culture and the Aboriginal Heritage of the area. However, there is no specific Aboriginal archaeology within the study area.

6.3.2 Environment and Sustainability

Site Vegetation and Soils
Much of the vegetation in the parklands at Apple Tree Bay appears to be underperforming, which is likely to be a result of compacted and nutrient deficient soils. Management of vegetation and associated soils is critical to the ongoing amenity of the park and should be undertaken proactively as an integral component to the site's maintenance regimes.

Flora and Fauna
Ku-ring-gai Chase National Park is particularly important in conserving a large area of relatively undisturbed vegetation. At Apple Tree Bay, endemic flora occurs primarily on the natural slopes at the site's perimeters and provides a visual counterpoint to the manicured landscape of the cultural park setting. The steepness of the terrain and the denseness of the existing vegetation tend to discourage access and damage in most areas, but ongoing maintenance is required to ensure that site use does not negatively impact on the vegetation.

Water Quality
Maintaining appropriate water quality controls at Apple Tree Bay is important in order to protect the quality of the water in Cowan Creek.

Water Sensitive Environmental Design (WSED)
The implementation of WSED at Apple Tree Bay involves the application of a broad range of measures aimed at reducing the reliance on the urban water supply system.

6.3.3 Landscape Character and Visual Quality
The visual quality of the setting of at Apple Tree Bay is diminished by detracting elements in the parklands, including expanses of bitumen, worn grass and stunted trees. Planning and management should aim to improve these characteristics and establish an integrated, harmonious visual relationship between the site and its surrounds. Careful attention needs to be made to ensure preservation of the views and vistas to the adjacent waterways and natural slopes, which are an important part of the experience of being at Apple Tree Bay.

6.3.4 Recreation and Visitor Facilities

The predominant recreational use of Apple Tree Bay is currently as a location for launching boats. The parklands have potential to cater better to a range of other recreational activities, in addition to maintaining its role as an important boat launching location within Ku-ring-gai Chase National Park. Future planning should seek to realise this potential by implementing additional facilities and creating a more amenable environment to passive, park-based recreational activities such as picnicking and enjoying the natural setting.

6.3.4.1 Signage and Wayfinding

Information and wayfinding systems are required to assist visitors with all aspects of the parklands: environment, recreation, Aboriginal and non-indigenous heritage, sustainability, archeology, regulations, restrictions, waste management, safety security and hospitality.
A consistent, visible, legible and integrated signage and wayfinding system should be of high quality and appropriate to the parkland characteristics:

Actions
- Establish an integrated way-finding strategy to assist with the orientation of users, both inside the Park and in the surrounding pedestrian and vehicular road network.
- Implement a coordinated suite of interpretive signage that focuses on both the natural and cultural (European and Aboriginal) values of Apple Tree Bay and its environs.
- Use high quality, durable, vandal-resistant infrastructure (e.g.,sturdy materials, tamper-proof fastenings, anti-graffitti coatings).

Design Principles
- Ensure new signage structure is sympathetic to the cultural significance of the place and visually integrated. Installation of signage should not damage significant fabric of a heritage item.
- Locate signage to avoid obstruction of views.
- There should be an efficient use of mounting structures, through consolidation, to reduce visual clutter. Signage may be mounted on existing infrastructure such as lamp posts.
- Signage should be ergonomically designed, changeable where required and legible from the intended distance.
- Park signage to meet NSW National Parks and Wildlife Service Signage Design Standards.
- Utilise the National Parks and Wildlife Service Park Facilities Manual where appropriate.

Refer to Volume 2, Part 2 CMP, Policy 6.12 and 6.13.

6.3.4.2 Utilities and Services

Services and utilities are required for the proper and effective functioning of the park. Generally, services and utilities are required to be located underground. In certain circumstances making features of utilities could be considered.

Actions
- Remove or properly terminate existing redundant systems.
- Existing services such as stormwater drainage, electrical systems, telecommunications, sewerage, water supply, irrigation, fire fighting systems and security systems are to be concealed, safe and vandal resistant.
- Consideration must be given in planning and upgrading underground services to the parklands that are subsiding.
- Construction management plans must include services locating and identification.
- Design cost effective and robust reticulation and future provision allowances for services.
- Where service infrastructure is located within high traffic areas, such infrastructure is to be powder coated to blend in and/or screened by appropriate landscape.
- Overhead power cable leading to the kiosk / garage building to be placed underground.

Design Principles

- Ensure new services are located to minimise damage to infrastructure and vegetation, should service access be required.
- Re-use existing systems where possible.
- Location of large, above-ground infrastructure (e.g., substations, large cabinets and overhead powerlines) is not permitted within identified main thoroughfares and vistas.

6.3.4.3   Materials and Finishes

Materials and finishes are the most sensory of all aspects of the parkland development. Colour, texture, durability and finish assist in developing a palette that would be appealing. Material selection is a critical component of the development of new works, especially in a heritage and conservation environment.

Actions

- Undertake an assessment of colour, materials and finishes for the shelters, buildings and signage.

Design Principles

- Sandstone, brick, timber and steel should be primary materials used for any new built elements.
- Where possible, all furniture should appear as part of the landscape (eg use rocks for seats and tables etc).
- Select materials which are durable with minimal maintenance requirements and integrate well throughout the parklands.
- Ensure materials are harvested in an ecologically sustainable manner.
- Ensure materials are able to be installed and managed with a minimal impact upon the environment.
- Use vegetation as the first preference for screening, shading and spatial definition.
- Taking into account the LMP design requrements, meet principles as outlined in NSW Park Facilities Manual, Facilities Planning Volume A, and Volume B, Facilities Catalogue.

6.3.5 Security

Vandalism to park infrastructure and car and boat break-ins occur regularly at Apple Tree Bay, particularly after-hours owing, to the uncontrolled access to the site. Consideration of the layout of elements and the choice of materials and fittings may reduce the incidence of anti-social activities and enhance the sense of security for visitors using the park. National Parks and Wildlife Service is considering providing lighting in the park to assist with security.

6.3.6 Access, Circulation and Car Parking

The dominance of the car park at Apple Tree Bay compromises the parkland amenity, safety of visitors and discourages use of the park for recreational experiences other than boating. Future planning should seek to overcome this dominance by consolidating roads and parking and rationalising the extent of hard surfaces. It is important to maintain car parking numbers due to the significant and growing visitor demand.

Section A - Northern Edge and Car Park

Section B - Foreshore Precinct

Figure 6.2. Apple Tree Bay Sections - NTS

6.4   Design Description

Refer to Volume 2, Part 3 LMP, Chapter 6.0 for the full description of the Apple Tree Bay Masterplan design.

The revitalised landscape design for Apple Tree Bay proposes new works to maintain and improve the popular use of the park for boating while realising the park's potential to cater better to a diversity of recreational opportunities, relieving some of the current visitation pressures.

General Parkland Revitalisation

The parklands of Apple Tree Bay will be transformed to a shady naturalistic landscape which integrates with the natural setting and provides improved recreational and educational opportunities for visitors, including boat launching. The realisation of this vision requires the relocation and reconfiguration of the roads and car park to the rear of the site, opening up a broader area of parkland along the northern and eastern waterfronts

Undulations in the parkland topography wil help to mitigate the visual and noise impacts from the carpark area to the parklands. The undulations will be sensitively designed to retain sightlines and ensure easy maintenance, while providing visual interest and definition to areas of the parklands.

New picnic facilities including shelters, barbeques, benches and tables are proposed to be constructed throughout the park. Pathways are proposed, connecting pedestrian desire lines, in particular adjacent to car parking areas, tracks and access to the amenities building. A coordinated suite of wayfinding and interpretative signage will assist park users. A large group shelter with barbeque facilities is proposed in the western portion of the park adjacent to new bus parking. Occasional clusters of sandstone boulders placed throughout the parklands will also provide interpretive elements, seating and picnicking surfaces, enhancing the sense of being in the natural environment. Waste and recycling disposal facilities will be provided near to picnicking facilities and will be visually downplayed by sensitive detailed design.

New tree planting is proposed to be entirely selected from species of local provenance to integrate with the surrounding bushland. Tree selection will be based on species with good shade provision and which are tolerant to site conditions (including salinity), do not drop limbs and are not invasive to bushland. All utilities and services will be concealed underground and will be adapted and coordinated. Subtle, recessive lighting will be provided for security and ambience and will be concentrated to access and use areas required for night visitor use, particularly around the kiosk and amenities building.

Safety and Security and Traffic Management

National Parks and Wildlife Service is considering safety and security improvements for all access to the parklands. Traffic management measures, line markings, signposting, penalty notices and enforcement are proposed to assist all boat ramp and parking users in optimising use of this facility. A new pontoon will assist with boat ramp in / out queuing from water side access. A designated wash down area will prevent salt water from damaging the parkland soils and vegetation; the water will be directed to the saltmarsh area at the foreshore. An emergency helicopter landing area will be provided on the vehicle loading area for emergencies. Provision is made also for bus parking, trailer parking, disabled parking and short term parking. New tree plantings will provide shade and amenity to car parking areas.

Apple Tree Bay Foreshore Area

The foreshore area will be the central parkland focus for Apple Tree Bay. The foreshore will be upgraded to a series of tidal rock pools, saltmarch basins and sandstone platforms, laid out in a pattern reflective of rippled water. The platforms will provide places for seating, picnicking and fishing, under the protection of shade trees.

The existing foreshore building will be converted to a kiosk / café with outdoor seating under shade trees, taking advantage of the views to Apple Tree Bay. An interpretive area will be established adjacent to the kiosk. New pedestrian desire lines to tracks and the parklands will reduce conflict in areas associated with the ramp launch area. The boat launch ramp and the parklands will be separated by gentle landscape undulations, which are seen elsewhere at Apple Tree Bay, and assist with noise mitigation and spatial definition. The boat launch facilities will be upgraded with a new road configuration and traffic management systems, which will improve safety, and the efficiency of the queuing system, while reducing hard surfacing. New pedestrian crossings are proposed to be installed at the road crossing to the relocated Apple Tree Bay Bridge, to improve pedestrian safety. A new signposted canoe launch facility catering to experienced users is proposed to be established adjacent to the boat launch ramp. The existing jetty and pontoon adjacent to the boat ramp are proposed to be replaced with a new jetty and pontoon. The existing fish cleaning facility will be upgraded and relocated adjacent to the boat wash down area.

Integration and Sustainability

Principles established to guide the development of the infrastructure need to be sensitive to the natural setting and coordinated with the design of other infrastructure and facilities in the park, utilising similar materials, forms and finishes. Interpretation is proposed to emphasise the natural significance of Apple Tree Bay as well as providing information on indigenous cultural heritage and the park's history and its use as a 'pleasure ground' within the bushland setting.

Indigenous plantings, robust landscape design and establishment as well as new low energy, low pollution waste management facilities will be incorporated into the design. This approach ensures that future generations continue to enjoy the naturalistic and essentially different qualities of Apple Tree Bay compared with those of Bobbin Head. In the future, connecting tracks between the two premier recreational areas of the Ku-ring-gai Chase National Park will emphasise the significant visual environmental qualities of the place.

The design of Apple Tree Bay Masterplan fulfils the vision as set out in Volume 2, Part 1 Masterplan, Chapter 2.0, as well as the actions set out in the Ku-ring-gai Chase National Park Plan of Management 2002.

Reference should be made to the LMP Chapter 6.0 for Design Principles and Actions required to achieve the Vision.

7.0 Summary Recreational Planning

Refer to Volume 3, Appendix 1.5 Recreational Planning Report.

Visitors to Apple Tree Bay currently enjoy a range of recreational pursuits. These include family recreation in the form of picnics and BBQs, boating (powered and non-powered), hiking, walking, a variety of nature-based activities, and fishing. The underlying appeal of each activity in the parklands is the sense of attachment to and association with nature.[12]

7.1 Consultation

Refer to Volume 3, Appendix 4, Summary Submissions Report.

The general objective for consultation was to ensure that primary planning and policy decisions were consistent with community requirements, aspirations and user needs for the parkland development within the general requirements of the Ku-ring-gai Chase National Park Plan of Management 2002.

The community was consulted extensively in the period leading up to the masterplanning process and during the formulation stages of this Masterplan. Four streams of consultation were undertaken consecutively as part of the masterplanning process to ensure that primary areas of interest were captured early.

- Consultation with External Stakeholders (groups with specific interests and parkland uses)
- Consultation with the general public
- Consultation with National Parks and Wildlife Service/Department of Environment and Conservation management and personnel
- Consultation with government and non-government agencies

The Summary Submissions Report identifies general comments and matters raised by the general public regarding the Draft Masterplans for Bobbin Head and Apple Tree Bay. Recommendations are included in the Masterplans as a result of the public exhibition and submissions made in response to the Draft Masterplans.

The 'Detailed Submissions Report' for Bobbin Head and Apple Tree Bay 2006 Draft Masterplan supports the Summary Report and provides a comprehensive assessment of the submissions received. Reference to this report is required to view copies of the original submissions.

The Masterplanning process included considerable consultation with various public interest groups. The consultation process is captured in the Masterplanning documents as part of the design methodology. The Draft Masterplan public exhibition period was widely advertised from the outset of the Masterplanning process in January / February 2006.

Paid advertising of the Draft Masterplan public exhibition period (May / June 2006) was undertaken in newspapers with a readership estimated to be in excess of half a million people.

Submissions received
- Eight submissions were received in various written formats by email, fax and by post.

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[12] Stratcorp Consulting Pty Ltd (2006); An Assessment of Recreational Uses of Bobbin Head and Apple Tree Bay Precincts.

The low submission rate is ascribed to the following factors:

- A thorough community and stakeholder consultation process was undertaken during the Masterplanning of Bobbin Head and Apple Tree Bay, with all major issues incorporated into the Draft Masterplan.
- General availability of Department of Environment and Conservation / National Parks and Wildlife Service personnel and the Consulting Team (5 months) to resolve issues raised by interest groups and the general public during the whole of the Masterplanning process, including two External Stakeholder Meetings and two Community Workshops and presentations. Minutes of these meetings are available in a detailed submissions report.
- Extensive consultation with Department of Environment and Conservation / National Parks and Wildlife Service personnel and especially the Ku-ring-gai Chase National Park rangers, which helped the Masterplanning team understand the issues associated with the parklands.
- Stage 1   Community consultation concluded with 211 responses with most issues incorporated into the Draft Masterplan.
- Stage 2   Presentation of the Preliminary Draft Masterplan to community groups and external stakeholders in a workshop format with most issues incorporated into the masterplan. A minute of this meeting is available in the detailed submissions report.
- Consultation with RTA.
- Consultation with the National Parks and Wildlife Service Advisory Committee.
- The continuous availability of pre-prepared Feedback Forms to the general public regarding the Masterplan.
- A carefully considered consultation and Masterplanning process designed and managed by Department of Environment and Conservation and National Parks and Wildlife Service.
- Masterplans that achieve the project objectives.

Consequently, the extensive consultation and associated design resolution led to general acceptance of the content of the Draft Masterplans.

Amendments and professional editing of the Draft Masterplan occurred under the direction of Department of Environment and Conservation Management to achieve final Masterplan status. The sprit and general undertakings included in the Draft Masterplan were not materially altered, to ensure that the final Masterplan represent the Vision and Objectives established in the Draft Masterplan.

Presentation of recommendations made in the Summary Submissions Report were presented to the National Parks and Wildlife Service Advisory Committee for committee approval.

The final Masterplan with amendments is recommended to be endorsed by Department of Environment and Conservation / National Parks and Wildlife Service in August 2006.

7.1.1 Community Consultation

Refer to Volume 3, Appendix 1.5 Recreational Planning Report and Appendix 4 Submissions Report.

Prior to the Masterplan commission, Department of Environment and Conservation undertook general surveys regarding the Ku-ring-gai Chase National Park use, opinions and other information regarding Apple Tree Bay. These include:

- 1997 Easter Visitor Survey (Ku-ring-gai Chase National Park)
- 2004/05 Parks Visitor Survey (Central Branch Parks)

Two public community consultation meetings were held as part of the Masterplanning process. Dates and minutes of the two meetings are included in Appendix 6 Submissions Report.

Feedback was also collected from the public simultaneously through feedback forms during the initial planning stage and public exhibition stage. Collated data from these feedback forms are included in Appendix 6 Submissions Report when completed in June / July 2006.

7.1.2 External Stakeholders Meetings

Four external stakeholders' meetings were completed as part of the Masterplanning process. Participation was organized by Department of Environment and Conservation on an invitation only basis. The list of participants, dates of consultations and minutes of the workshops and meetings, as well as individual consultations with Stakeholders and collated results of these external stakeholder consultations, are included in the Summary Submissions Report.

7.2 Visitor Use – Visitor Profile

Refer to Volume 3, Appendix 1.5 Recreational Planning.

Recent data (2005) estimated visitor use of Ku-ring-gai Chase National Park to average 2000 people per week[13]. National Parks and Wildlife Service gate entry data and ranger observations show that visitation rates vary widely between weekends and weekdays and between holidays and non-holidays. The Easter survey (1997) found that the majority of these visits are half-day visits, with approximately a third staying for a full day.

Recent surveys consistently show visitors coming from a catchment of 10-20km radius. Visitors over 55 years old make up the majority of respondents.

According to the 1997 Easter Survey which includes Apple Tree Bay, the main reasons for visiting were picnic (27%), followed by BBQ (19%), sightseeing (11%), boating (10%), fishing (8%) and bushwalking (8%). The 2004/2005 Visitor Survey showed the main reasons was to rest and relax (64%), picnic (55%), socialize with family and friends (53%), short walk (44%) fishing and boating (30%).[14]

7.3 Community Values

Refer to Volume 3, Appendix 1.5 Recreational Planning.

Consistent with the findings of the 2004 / 05 Visitor Survey and the 1997 Easter Visitor Survey, key attributes valued by visitors to Apple Tree Bay were 'scenery and views', followed by 'outdoors / natural environment' and 'quietness / tranquility'.

- Safety and security in the parklands are identified as a major concern with the community.
- Reduction of conflict associated with boating / launching and vehicle queuing was identified as a community and management concern.

7.4 Visitor Use Planning Recommendations

Several initiatives and recommendations for improving the safety and recreational experience for visitors have been identified in the recreational planning process. Some of the key recommendations include:

- Expanded open space area and revetment treatment of the Bay foreshore to provide a better quality recreation space for visitors and to enhance the vista across the Bay.
- Increased and upgraded provision of visitor facilities including picnic areas, shelters, BBQs, park furniture and amenities.
- Upgrade the existing refreshment facility at Apple Tree Bay into a quality café with outdoor eating area looking out over Apple Tree Bay.
- Parking consolidated at the rear of the parklands to 'open-up' the Creek and foreshore.
- Introduction of interpretation areas to improve visitors' appreciation of the natural and environmental values of the parklands and natural environment.
- Development of separate facilities for canoe launching within the parklands.

[13] Estimate calculated from 2005 Gate Count Survey visitor data provided by DEC.
[14] 1997 Easter Survey, NPWS.

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8.0 Precinct Circulation and Parking

Refer to Volume 3, Appendix 1.3 Traffic and Transport Planning Report.

Circulation and parking are critical elements of the Masterplan. Increased demand for the use of Apple Tree Bay over recent years has placed pressure for the provision of parking. The majority of the park is currently dominated by car parking, which developed historically. Within the limited resources of the National Park, a balance must be found between the provision of circulation and parking, and the provision of recreational space.

Apple Tree Bay circulation policies govern both land and water activities. Circulation at Apple Tree Bay includes pedestrians, the disabled, cyclists, cars, cars with boat trailers and private buses.

Objective
- To optimise the parkland space through redesign of the parking area.
- To create a safe and pleasant road network for the use of a variety of vehicle types.
- To improve safety for pedestrians, cyclists, disabled persons and vehicles through improved traffic management, management of conflict areas, signposting and other safety measures.
- To reduce harm to native fauna.
- To improve safety and security in the parklands.
- To optimise road and parking layouts through careful planning.

Actions
- All road and parking designs will comply with Austroads and RTA guidelines.
- Increase parkland recreation area, especially along the water's edge.
- Maintain same numbers of trailer parking on asphalt. Additional future parking bays may be available on permeable or grassed surfaces.
- Increase the number of car-only parking bays.
- Limit the extent of asphalted surface.
- Reduce the dominance of car parking on the parklands.
- Relocate the parking towards the rear of the parklands.
- Protect the natural landscape; do not disturb existing bushland areas.
- Vehicle parking circulation will be intuitive and a one-way loop to improve land-use efficiency, wherever possible.
- Create a traffic management strategy (including linemarking) and install safety measures to resolve / manage conflict between pedestrians, cyclists and vehicles / boat trailer operations.
- Investigate appropriate measures to reduce 'road-kill' on all roads.
- Incorporate a clear zone for an emergency helicopter landing area at the boat ramp area.
- Ensure a clearway in the landscape for the National Parks and Wildlife Service boat in the kiosk building to access the ramp for boat launching.
- Provide signage at the foreshore and creek areas to discourage swimming, due to dangerous conditions.

8.1   Pedestrian

Apple Tree Bay is, currently, predominately a parking zone. However, pedestrian traffic to and from the amenities building and shelters is high. Conflicts between pedestrian and vehicles, especially dangers to children from vehicles with trailers, should be minimised. There is currently no dedicated pedestrian connection between Bobbin Head and Apple Tree Bay.

Objectives
- To create a safe and pleasant environment for pedestrians to increase their enjoyment of Apple Tree Bay.
- To minimise conflicts between pedestrians and vehicles, especially at the boat launch and entry areas to the parklands.
- To improve pedestrian connectivity between Apple Tree Bay and Bobbin Head.

Actions
- Create a traffic management strategy to minimize and manage conflict between pedestrians and vehicles.
- Address pedestrian desire lines and provide paths and crossings at locations at or closest to these lines.
- Relocate the existing pedestrian bridge at Apple Tree Bay or build a new bridge to reduce conflicts between reversing vehicles / trailers at the boat ramp and pedestrians.
- Provide a Walking Track between Apple Tree Bay and Bobbin Head.

8.2   Mobility Impaired / Disabled

Refer to Volume 2, Part 2 CMP, Policy 6.11.

All parkland amenities should consider equal access for the aged and disabled. All amenities must comply with the provisions of the Disability Discrimination Act.

Objectives
- To provide non-discriminatory access to all essential facilities and buildings for the mobility impaired and disabled.
- To limit areas of inaccessible or difficult access and provide early warning for such.

Actions
- All amenities and new facility provisions are to comply with the requirements of the Disability Discrimination Act.
- Locate facilities on ground level, wherever possible.
- Where facilities and features are elevated, provide ramps for access.
- Provide Braille displays on interpretation panels and important signage.
- Disabled carparking to be provided at a minimum of 2% of the total number of lots across the site.
- Disabled facilities to be provided include, but should not be limited to, – toilets, public telephones, interpretation signage, picnic tables, and carparking lots.
- Provide 5 minute parking areas for the use of mobility-impaired visitors.
- Signpost areas of the parkands that are inaccessible (due to physical constraints) or difficult for disabled persons to access.

8.3   Public Transport

Refer to Volume 3, Appendix 1.3 for Traffic and Transport Planning Report.

There is currently no public transport to Apple Tree Bay. There is a public bus connection between Turramurra Station and Ku-ring-gai Chase National Park entrance.

Objectives
- To promote public transport to Apple Tree Bay to ease pressures on private vehicle parking provisions.

Opportunities
Investigate potential for public transport to Apple Tree Bay and Bobbin Head.

8.4   Private Vehicles

Refer to Refer to Volume 3, Appendix 1.3 for Traffic and Transport Planning Report.

The easiest way to access Apple Tree Bay is by private transport, such as cars, cars with trailers, and chartered buses for organized groups.

8.4.1 Cars
Provision is required for visitors with cars, in terms of both parking and road access. However, a balance is required between the conservation and aesthetic aspect of Apple Tree Bay and traffic requirements.

Objectives
- To clarify the hierarchy of circulation on site to ensure safety and improve legibility.
- To increase current car parking numbers.
- To reduce the dominance of carparking at Apple Tree Bay.

Actions
- Circulation and parking requirements must be designed according to Austroads and RTA guidelines.
- Traffic calming devices to reduce speed, and safety features are to be implemented throughout the parklands, especially where conflicts with pedestrians, cyclists and disabled persons occur.
- Improve traffic slowing and safety provisions on Apple Tree Bay Road and the parklands.
- Minimise impermeable hard surfaces and locate parking away from prime vistas.
- Safety features and road surfaces are to be quiet and designed to reduce noise impacts.
- The landscape design is to ensure that sightlines and safety features are legible.

8.4.2 Cars with Trailers
Vehicles (cars) with trailers generate the majority of traffic in Apple Tree Bay.

Objectives
- To ensure that access routes to boat launching areas easily accommodate cars with trailers.
- To maintain existing parking numbers for vehicles with trailers at Apple Tree Bay.
- To ensure that traffic slowing measures consider trailers and noise pollution.
- To reduce the dominance of trailer movements and parking at Apple Tree Bay.

Actions
- Circulation and parking requirements must be designed according to Austroads and RTA guidelines to accommodate cars with trailers.
- Minimise impermeable hard surfacing and locate parking away from prime vistas.
- Ensure that car/trailer bays are line-marked 12m x 3m to facilitate convenient parking
- Create logical and orderly traffic queuing facilities at Apple Tree Bay to retrieve boat launching / hook-up conflicts.
- Provide trailer wash-down at the ramp area to reduce saltwater impact on landscape salinity with discharge to saltmarsh area.
- Provide a pay-and-display facility for long-term parking, to prevent cars and trailers stopping at Apple Tree Bay.
- Consider systems to assist trailer parking.

8.4.3 Private Buses
Refer to Volume 3, Appendix 1.3 for Traffic and Transport Planning Report.

Corporate and other large groups using the park's facilities charter buses and require parking areas within the park.

Objectives
- To ensure that access routes to Apple Tree Bay accommodate buses.
- To provide sufficient parking for buses at Apple Tree Bay.
- To locate parking for buses in visually unobtrusive locations.
- To provide parking for disabled persons buses.

Actions
- Access via private buses is to be encouraged as buses are seen as better use of space and resources.
- Bus parking spaces should be located away from prime vistas, preferably at the foot of the cliffs.
- Provide necessary signage, especially near the junction of Bobbin Head and Apple Tree Bay Roads advising of coach entry restrictions.

8.5   Boating

Boating is currently the main source of activity in Apple Tree Bay. Demand for use of the public boat ramp is high, and a source of conflict at peak times.

Objectives
- To cater to the demands on boating facilities without compromising the natural and scenic qualities of Apple Tree Bay.
- To mitigate impacts on the natural environment and infrastructure, such as water quality and walking tracks, from watercraft within the bay.
- To ensure the safety of all watercraft users within the bay.

Actions
- Review boating speed limits and make consistent.
- Investigate and implement appropriate boat speed zone limitation to reduce noise pollution.
- Resolve conflicts between larger and smaller watercraft through a water traffic management systems.
- Install facilities to reduce water pollution from boating in Apple Tree Bay.
- Provide adequate on-water wayfinding and maritime signage / notification and assistance.
- Provide a navigated pontoon at the ramp to assist with boat traffic management.
- Signage is to be provided notifying canoeists and boat operators of dangerous conditions.
- Signage restricting the canoe launch area for the use of experienced canoeists will be provided.
- Canoe stands and wash down facilites will be provided.

8.6   Cycling

Refer to Volume 3, Appendix 1.3 for Traffic and Transport Planning Report.

Cycling, especially mountain biking, has become increasingly popular in recent years. There are currently a few biking trails maintained for mountain bikers in Ku-ring-gai Chase National Park. There is currently no dedicated cyclist facility in Apple Tree Bay or on Apple Tree Bay Road.

Objectives
- To promote cycling as an alternative transport mode to access Apple Tree Bay.
- To provide safer cycle access routes to Apple Tree Bay.
- To improve/ increase cycle facilities at Apple Tree Bay.

Actions
- Cycling is to be encouraged as an environmentally appropriate alternative to access Apple Tree Bay.
- Provide lockable bicycle racks at a highly visible area.
- Provide safer cycle access routes to Apple Tree Bay.
- Signage is to be provided restricting cyclists from accessing walking tracks.
- Provide systems to assist cyclists on roads.

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9.0   Masterplanning

9.1   Methodology

The Masterplan includes a balanced approach to heritage conservation management (CMP) and landscape management planning (LMP) in its formulation. Opportunities and constraints identified by both the CMP and LMP through the design process has guided the design of the Masterplan. The resulting illustrative Masterplan for Apple Tree Bay is the amalgamation of the key strategies determined by the conservation management, landscape management and recreational planning. Community Consultation is an integral part in the Masterplanning process.

This Masterplan is compliant with Statutory Documents, including The Ku-ring-gai Chase National Park and Lion Island, Long Island and Spectacle Island Nature Reserves Plan of Management (2002). The Masterplan fulfils non-statutory obligations.

Figure 10.1 over page, illustrates the key steps and components of the Masterplanning process.
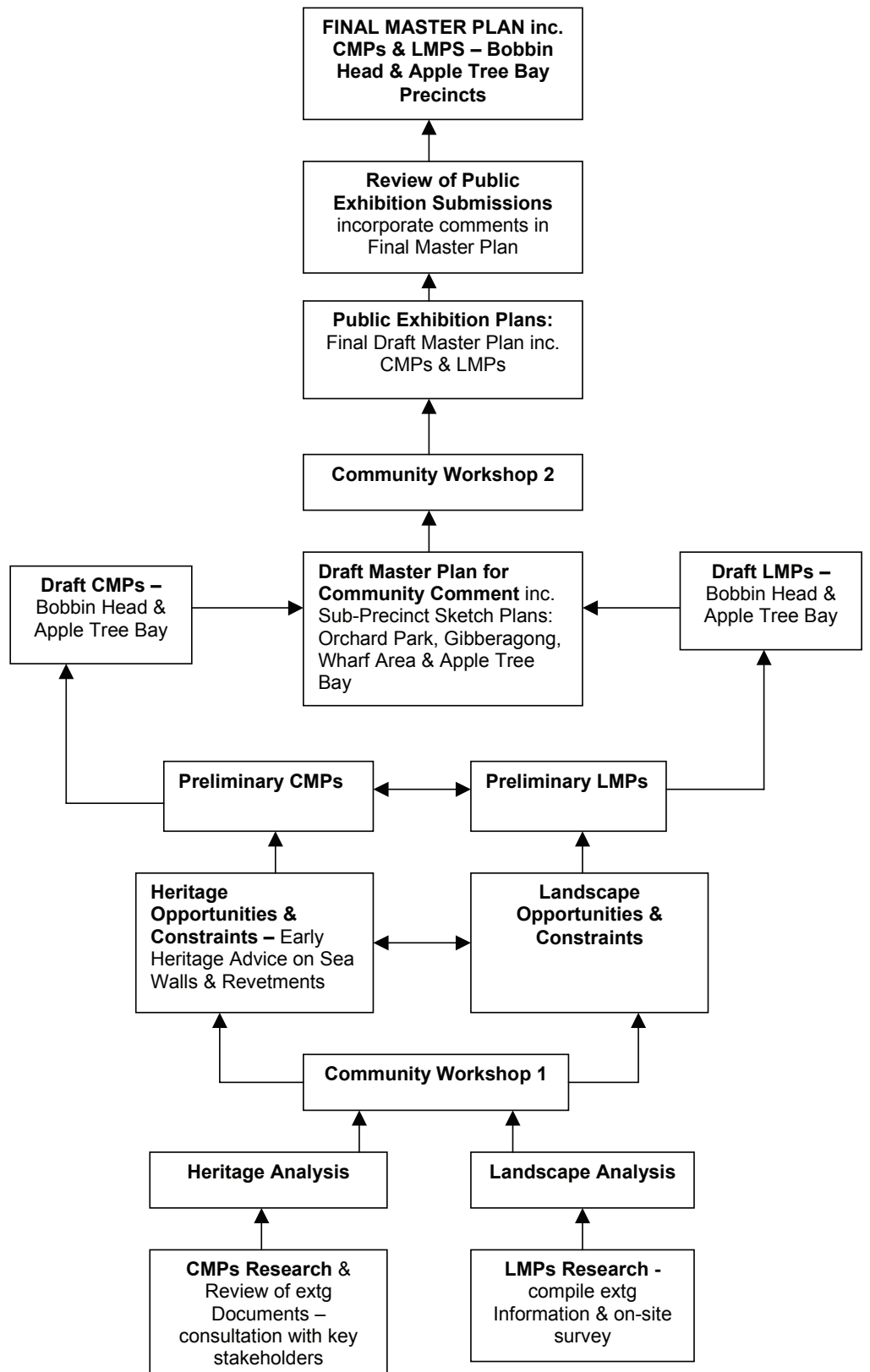
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│ Draft CMPs – │──▶│ Draft Master Plan for    │◀──│ Draft LMPs – │
│ Bobbin Head &│   │ Community Comment inc.   │   │ Bobbin Head &│
│ Apple Tree Bay│  │ Sub-Precinct Sketch Plans│   │ Apple Tree Bay│
└──────────────┘   │ Orchard Park, Gibberagong│   └──────────────┘
       ▲           │ Wharf Area & Apple Tree  │          ▲
       │           │ Bay                      │          │
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│ Preliminary CMPs│◀────────────────────▶│ Preliminary LMPs│
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│ Heritage        │                      │ Landscape       │
│ Opportunities & │◀────────────────────▶│ Opportunities & │
│ Constraints –   │                      │ Constraints     │
│ Early Heritage  │                      └─────────────────┘
│ Advice on Sea   │                              ▲
│ Walls & Revetments│                            │
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│ Heritage Analysis│                     │ Landscape Analysis│
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┌─────────────────┐                      ┌─────────────────┐
│ CMPs Research & │                      │ LMPs Research - │
│ Review of extg  │                      │ compile extg    │
│ Documents –     │                      │ Information &   │
│ consultation    │                      │ on-site survey  │
│ with key        │                      └─────────────────┘
│ stakeholders    │
└─────────────────┘
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Figure 10.1. Masterplanning Process, 2005
(Source: Bobbin Head and Apple Tree Bay Masterplan Tender Document)

9.2   Planning Context

The Ku-ring-gai National Park is managed through structures which include planning instruments, policies, guidelines, as well as collaboration with other government agencies. This Masterplan was formulated within the planning context of statutory and non-statutory requirements as follows.

9.2.1   Statutory compliance

National Parks and Wildlife Act (1974)
The Act legislates the care, propagation, conservation and study of wildlife, natural environments and natural phenomena as well as the promotion of the appreciation and enjoyment of nature as the main purposes of a National Park. This Act also legislates the protection to Aboriginal Heritage.

Environment Protection and Assessment Act SEPP 4 (1979)
Under this Act, development on land administered by National Parks and Wildlife Service does not require consent from local government, but is subject to internal assessment under Part 5 of the EPA Act. This SEPP overrides any existing relevant regulations in Local Environmental Plans (LEP) which may affect these lands.

Fisheries Management Act 1994
For the benefit of present and future generations, this Act covers the conservation, development and sharing of fishery resources of the State, in particular threatened species and key fish habitats. The Fisheries Management Act also promotes ecologically sustainable development, including the conservation of biological diversity. This Act would cover all aquatic life, including fish, crustaceans, oysters and other aquatic molluscs.

Threatened Species Conservation Act 1995 (TSC Act)
This Act legislates the conservation of bio-diversity, promotes ecologically sustainable development, prevents extinction, promotes the recovery of threatened species, protects critical habitats, eliminates and manages threats to the survival of threatened species, ensures the proper assessment of impacts on these species and encourages conservation through co-operative management.

NSW Heritage Act (1977)
This Act provides for the conservation of environmental heritage, including places, buildings, works, relics, moveable objects and precincts of State or Local Heritage Significance.

The Aboriginal and Torres Strait Islander Heritage Protection Act 1984
This Act complements State legislation and is intended to be used only as a 'last resort' where state laws and processes prove to be ineffective. Under this Act, the responsible Minister can make temporary or long-term declarations to protect areas and objects of significance under threat of injury or desecration. The Act also encourages heritage protection through mediated negotiation and agreement between land users, developers and Aboriginal people.

Environmental Planning and Assessment Act (1979)
The Environmental Planning and Assessment Act (EP&A Act) requires that consideration be given to environmental impacts as part of the landuse planning process. In NSW, environmental impacts include cultural heritage impacts.

Sydney Regional Environment Plan (SREP) No. 20 Hawkesbury Nepean River
Under SREP 20, Ku-ring-gai Chase National Park is considered an environmentally sensitive area, due to its reserved status. SREP 20 states that the environmental quality of these areas must be protected and enhanced through control of future land use changes and through management of existing use.

The Ku-ring-gai Chase National Park and Lion Island, Long Island and Spectacle Island Nature Reserves Plan of Management (2002)
The Plan of Management (PoM) is the current statutory control regulating management and operations of the Ku-ring-gai Chase National Park. This Masterplan, with amendments, will be consistent with the PoM (2002).

Building Code of Australia
All buildings within Ku-ring-gai Chase National Park should comply with the Building Code of Australia (BCA). Categorisation of buildings in Apple Tree Bay is to be determined by their future use.

Disability Discrimination Act (1992)
This Act deems it illegal to discriminate against persons with disabilities or their associates, regarding the means of access to premises.

Hornsby Shire Council LEP (1994)
All the sub-precincts of Apple Tree Bay fall under the boundaries of Hornsby Shire Council. Ku-ring-gai Chase National Park is listed as having State Heritage Significance.

Ku-ring-gai Municipal Council Planning Scheme Ordinance (2003)
Neither Ku-ring-gai Chase National Park, nor any item associated with the place, is listed in the Ku-ring-gai Municipal Council planning instrument.

9.2.2 Non Statutory Considerations
The primary non-statutory planning and facilities obligations are derived from:

- Living Parks – A sustainable visitation strategy, Department of Environment and Conservation (NSW) 2006.
- Facilities Planning – Parks Facilities Manual, Volume A, Parks and Wildlife Division, Department of Environment and Conservation (NSW) 2006.

- *Obligations from Charters including the Burra Charter; International Cultural Tourism Charter, Australian Natural Heritage Charter.*
These Charters stipulate that places of significance are worth keeping as they enrich our lives. The overall cultural significance of a place is embodied in its setting, use, meaning and contents. Research and recording of information is also a high priority. Adopting these Charters sets a cautious approach to all alterations to Apple Tree Bay.

- *International Union for the Conservation of Nature and Natural Resources (IUCN) (1994) Guidelines for Protected Area Management Categories.*
This document, adopted by National Parks and Wildlife Service for the purposes of preparing plans of management, defines a national park as:

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

- **Towards 2020 - New South Wales Tourism Masterplan (2003)**
  Towards 2020 - New South Wales Tourism Masterplan is a whole of government plan for the development of the tourism industry. It has been prepared by Tourism New South Wales on behalf of the NSW Government, involving over 40 State government agencies.
  Towards 2020 provides a planning framework based on understanding the present and managing the future. It builds on and develops the tourism planning framework established by the New South Wales Tourism Masterplan (1995 and 1998) - a watershed in Government planning for tourism.
- Compliance with Department of Environment and Conservation Corporate Values and Policy
- Department of Environment and Conservation management obligations for both natural and cultural resources within a local, regional, state, national and international context.
- Department of Environment and Conservation policy, planning and management documents including the NSW National Parks and Wildlife Service Cultural Heritage Strategic Policy; NSW National Parks and Wildlife Service Field Management Policies; NSW National Parks and

Wildlife Service Weed Management, NSW National Parks and Wildlife Service Pest Animal Management, Interim Guidelines for approvals; and Risk Management Strategic Plan.
- Ku-ring-gai Chase National Park - interim fire management strategy (2005)
- Rural Fires Act (1997)

9.2.3 Other Legislative Guidelines and Policies
Other legislative documents incorporating policies that are to be considered in Masterplanning and associated management of Apple Tree Bay include:

- The New South Wales Occupational Health and Safety Act (2000)
- Austroads and RTA Guidelines for traffic design
- Tenancy requirements and lease agreements

9.2.4   Government Agency Consultation
Apple Tree Bay exists within a larger landscape, at the confluence of two waterways, dissected by a public road.

The management of Apple Tree Bay includes liaison with a number of additional government agencies and groups including but not limited to:

- NSW Roads and Traffic Authority
- NSW Heritage Council and Heritage Office
- NSW Maritime Authority
- Hornsby Shire Council
- Ku-ring-gai Council
- NSW Heritage Council and Heritage Office
- Various local Aboriginal Land Councils and their respective Elder groups
- NSW Rural Fire Service
- NSW Fisheries
- Tourism NSW

9.2.5 National Parks and Wildlife Service Corporate Values and Policy
The NSW National Parks and Wildlife Service (NPWS) is the government body responsible for developing and maintaining the parks and reserve system, and conserving natural and cultural heritage, in the state of New South Wales, Australia.

The National Parks and Wildlife Service works with people and communities to protect and conserve natural and cultural heritage, through an integrated system of ecologically sustainable landscape management. The state's network of protected areas is the centrepiece of this system.

Corporate values of the National Parks and Wildlife Service[20]:
- Respect for Aboriginal culture and heritage
- Social cohesion
- Active community involvement
- Fairness and equity
- Professionalism
- Transparency in decision making
- Ethical conduct

[20] NPWS Corporate Plan 2000-2003

9.2.6 The Values of our Parks[21]
The masterplanning of Apple Tree Bay will adhere to the following values:

Natural values
Parks encompass some of the most scenic and biologically diverse lands in the state.

Cultural values
The conservation aspect of our Parks protects some of the state's most culturally significant places, while providing public access. These include places considered important to the Aboriginal communities.

Economic Values
The management and maintenance of the parks, combined with visitor expenditure, contribute to the economic activity of the local region.

Social Values
Parks provide a range of social benefits including recreation, tourism, education and social interaction between groups and families. They also support community wellbeing and provide opportunities for improving general community health through outdoor recreation.

9.3   Authorship

Conybeare Morrison International prepared the Masterplan. Bill Morrison was Company Director in charge of the project, Colin Polwarth, Associate Architect, was project leader, and Michelle Yik, Urban Designer.

9.3.1   Specialist Consultation
The formulation of this Masterplan entailed specialised technical consultation in various fields. The following are a list of consultants engaged and their respective reports, which have informed the outcome of this Masterplan.

Location - Volume 3	Field	Consultant	Reports/Recommendations
Appendix 1.1	Flora and Fauna	Australian Museum Business Services	Flora Constraints Report Fauna Advice
Appendix 1.2	Aboriginal Heritage	Australian Museum Business Services	Aboriginal Heritage Report
Appendix 1.3	Transport Planning	Arup	Traffic Report
Appendix 1.4	Geotechnical	Douglas Partners	Geotechnical Advice
Appendix 1.5	Recreational Planning	Stratcorp	Recreational Planning Report
Appendix 1.6	Soils	Sydney Environment and Soils	Soil Report
Appendix 1.7	Marine Engineering and Structure	TLB Structural Engineering	Seawall Flood levels Structure of Sunny Corner amenities building Structure of 'Bobbin Inn'
Part 2	Heritage	Conybeare Morrison International	Conservation Management Plan
Part 3	Landscape	Context Landscape Design	Landscape Management Plan

Table 10.1. Specialist Consultation Reports

[21] Living Parks – A sustainable visitation strategy, Department of Environment and Conservation 2006

10.0 Implementation

10.1   Actions Priorities Plan

The staging of the implementation of the Masterplan will be considered over a number of years. Staging will be assessed and prioritised as funds become available. The Masterplan will be cost planned and works prioritised as follows:

Short-term improvements:	1-3 years
Medium-term improvements:	3-5 years
Long-term improvements:	5-10 years
Future:	Potential Future Developments

10.2 Future Masterplanning

This is the first formal masterplanning document for Apple Tree Bay. During the National Parks and Wildlife Service management era, masterplanning decisions were contained in minutes of meetings and in various drawings and photographic reports. Masterplanning requires updating at regular intervals to ensure high quality standards are maintained and that current policy directions change according to changing values:

• Masterplanning upgrades should be undertaken in conjunction with the upgrades to the Ku-ring-gai Chase National Park Plan of Management.
• Masterplanning re-writes should be undertaken on a 20 year program to ensure that environmental, recreation, parkland and associated amenities are contemporaneous and of the highest standards.

10.3 Implementation Strategy

10.3.1 Commitments by the NSW Government
The New South Wales Government will invest an additional $38 million into the protection and presentation of Sydney's national park areas. More than $5.5 million will be committed to Sydney's northern national parks with $1.5 million of that identified for major upgrades at Bobbin Head and Apple Tree Bay to include sea walls, walking tracks and visitor facilities.

'The Government's increased investment will mean that revitalised national parks. Visitors will be better able to experience and enjoy our Sydney parks and reserves without compromising this precious natural and cultural resource.'[15]

'This Masterplan is part of the revitalisation project. $1.5 million has been allocated to the two precincts (Bobbin Head and Apple Tree Bay) as part of a $38 million Revitalising Sydney's National Parks initiative, a four year program to upgrade the natural and cultural features of the parks and reserves in and around Sydney.'[16]

Further capital funding will be sought for the progressive implementation of this Masterplan.

[15] Revitalising Sydney's National Parks. NSW Government budget commitments 2005-2008. Department of Environment and Conservation (NSW) May 2005.
[16] Hornsby Advocate; 20 April 2006; P.13

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10.3.2 Staging Strategy

The staging strategy for construction of the parklands and facilities are documented in the summary below. This is an indicative approach to the proposed improvements to Apple Tree Bay over a number of years. The staging strategy is as follows:

- **Short-term improvements (1-3 years)**
  - Provision of pay & display meters for overnight stays.

- **Medium-term improvements (3-5 years)**
  - Provision of Apple Tree Bay Road entrance slowing & entrance / feature area.
  - Provision of new bike stands.
  - Improved safety and sustainability provisions.
  - Completion of new roads & parking areas, including safety features.
  - Upgrade to parkland amenities.
  - Construction complete of new wash down bay, cleaning areas, signage and line markings.
  - Interpretation and signage facilities.
  - Raising of kerbs at parking areas to prevent trailers parking on lawns.

- **Long-term improvements (5-10 years)**
  - Provision of new bin & recycling areas, fish cleaning facility.
  - Relocation of Apple Tree Bay Bridge.
  - Completion of new revetment area, new boat launch pontoon.
  - Reconstruction of portion of sandstone retaining walls.
  - New parkland undulations for noise & visual mitigation.
  - New soft landscape works and new picnic shelters & furniture.

- **Potential Future Options**
  - Upgrade of Kiosk Building to DDA/BCA compliance including new kitchen & servery, façade restoration, general upgrade to roof, exterior floor finishes, etc.
  - Upgrade of toilets to DDA compliance.
  - Upgrade of foreshore areas.
  - Masterplanning upgrades, naming of parklands, new security surveillance provisions.
  - Conservation of archaeological sites, etc.
  - Construction of Apple Tree Bay to Bobbin Head track.

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11.0 Conclusion

This Masterplan is the first formalised Masterplan for Apple Tree Bay. There are no previous records of the masterplanning of Apple Tree Bay since the Ku-ring-gai Chase National Park was gazetted in 1894. This process is necessary to ensure that the parklands continue to provide, in a sustainable manner, their critically important and multifarious function to the community they serve, while protecting the natural and cultural heritage.

The Draft Masterplan was on public exhibition and available for comment in June / July 2006. All consultative submissions were assessed. Department of Environment and Conservation Management considered staging and priority actions to implement the Masterplan, subject to available funds over a 30 year period. The Final Masterplan will be regularly reviewed and updated, in accordance with approved time-frames.

This Masterplan presents the most significant and fundamental improvements to Apple Tree Bay since the 1950s reclamation. The Vision sets out to embrace the significant surrounding bushland and landscape, to reinterpret the more important and visually pleasing characteristics of the parklands, and to reduce or negate the impacts of undesirable qualities.

Sustainability, safety and security are primary issues associated with the parklands. In association with a general upgrade and improvement of amenities, the upgraded parklands will delight current and future generations with reinvigorated and current standards.

Safety on Apple Tree Bay Road and within the parking area will be improved and traffic will slow down. The roads and parking will be consolidated towards the back of the parklands, optimising landscape space for passive recreation at the water's edge. The landscaped reclaimed mudflats will be reinterpreted as a contrast of form against the natural valley bushland setting. Gentle, sculpturally formed undulations will assist with the mitigation of traffic noise impacts on the parklands. Plantings, the foreshore and built elements will reflect patterns and textures seen in the natural bushlands. The trees and shrubs making up the landscape are to integrate seamlessly with the bushland environment. The re-opening of the kiosk/café will provide Apple Tree Bay with a much sought-after refreshment outlet and a focus to the Apple Tree Bay.

Professional and / or advanced canoeists will have signposted and improved launching facilities. Recreational boating facilities will be upgraded. The parklands will be improved with education, wayfinding, information and heritage (non-indigenous and Aboriginal) interpretation facilities provided throughout the park and along trails.

The proposed future track between Bobbin Head and Apple Tree Bay will become a destination in itself. The dramatic views, rest areas and the serenity of Cowan Creek will be opened up to the general public, and the track will complete the Bobbin Head and Ku-ring-gai Chase Track network for the Ku-ring-gai Chase National Park.

The Masterplan establishes the Vision. Management will implement the principles and actions to achieve the Vision, with priorities established over a number of years, but subject to update and continuous improvement. Future generations will continue to benefit from the cultural and natural landscape, fully understanding the implications, methods and strategies employed to achieve the Vision.

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