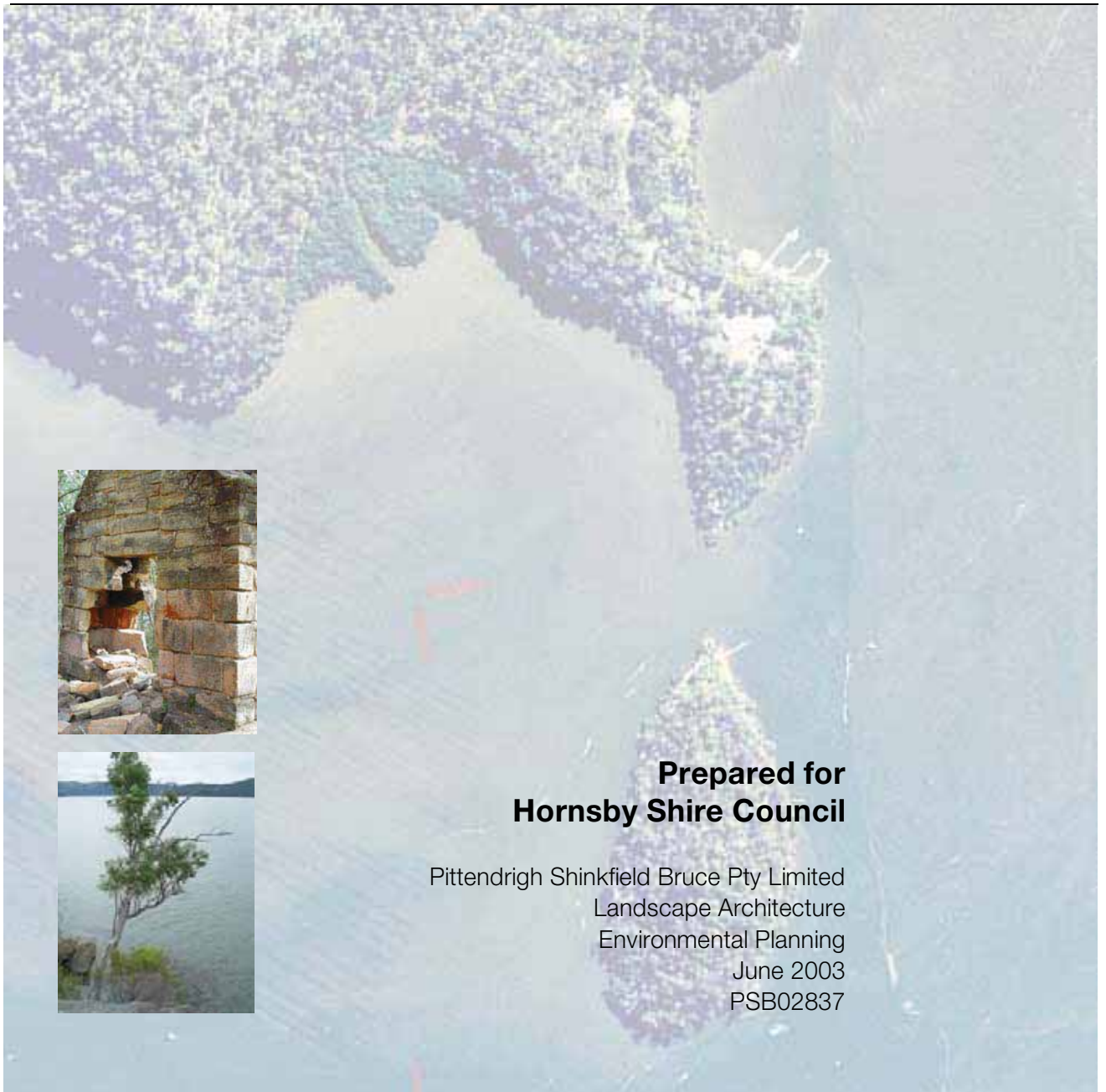


# **BAR ISLAND Berowra Creek**

## PLAN OF MANAGEMENT



**Prepared for  
Hornsby Shire Council**

Pittendrigh Shinkfield Bruce Pty Limited  
Landscape Architecture  
Environmental Planning  
June 2003  
PSB02837

This Plan of Management has been prepared to comply with the *Local Government Act 1993* and the *Crown Lands Act, 1989*.

### **Community Input Into Plans Of Management**

The *Local Government Act, 1993* requires that all Plans of Management be placed on public display for a minimum period of 28 days. A minimum period of 42 days after the draft is placed on exhibition is allowed for written submissions to be made to Council (s. 38). By writing a submission, members of the community are given the opportunity to participate in the future direction of management of the Shire's Open Space.

Submissions allow the community (including residents, interest groups and Government agencies), to express opinions, provide information and suggest alternatives to the proposed management strategies for community open space within the Shire. On closure of the period of public comment, all submissions are considered and amendments made to the Plans of Management as required.

After consideration of all submissions received, Council may decide to amend the draft plan of management, or adopt it without amendment. If Council decides to amend the draft plan, it must publicly exhibit the amendments as above until such time as the draft can be adopted without further amendment (s. 40).

### **Public Hearing**

The *Local Government Amendment (Community Land Management) Act, 1998* requires that a public hearing be held in respect of a proposed Plan of Management if the proposed Plan would have the effect of categorising or recategorising the community land (s. 40A).

A Public Hearing was held on 10<sup>th</sup> April 2003 by an independent person, because the Bar Island draft Plan of Management proposed to categorise parts of the Island as "bushland", "foreshore" and "an area of cultural significance" (refer to Figure 2 – Ownership and categorisation of the land on Bar Island). The independent public hearing report found that the categorisation of the community land proposed by the draft Plan of Management for Bar Island should be adopted without alteration.

Further information can be obtained from the Bushland and Biodiversity Team.  
Telephone No: 9847 6707

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## 1.1 BACKGROUND

Bar Island is a small bushland covered island located off Fishermans Point on the Hawkesbury River approximately 10km to the west of the township of Brooklyn (see Figure1).

Bar Island is an important part of the history of the Hawkesbury River from Aboriginal use through to early European settlement, and the establishment of river settlements. The Island is currently under the joint ownership of Hornsby Shire Council and the Crown.

The northern part of Bar Island was previously owned by the Anglican Church and was transferred to Hornsby Shire Council on 12<sup>th</sup> May 2000, in accordance with the recommendations of a Conservation Plan for Bar Island prepared in 1996 (Jean & Lavelle). Hornsby Shire Council became lessee of the jetty in 2000 following the transfer of the adjoining land.

In 2001 three options were investigated for the possibility of NSW National Parks and Wildlife Service (NPWS) management, Hornsby Shire Council management, or joint management by NPWS and Council. After assessment it was determined that the best option was for Bar Island to remain under the control and management of Hornsby Shire Council, mainly because the Island is too remote to be incorporated into Berowra Valley Regional Park, the 'regional park' status is not suitable in light of the heritage significance of the Island, and Council would be able to secure funding that is not available to State government agencies.

Hornsby Shire Council has commissioned Pittendrigh Shinkfield Bruce (PSB) to prepare a Plan of Management for Bar Island in order to provide direction for its future use and management and to fulfill its statutory obligations under the *Local Government Act 1993* and *Crown Lands Act 1989*.



Figure 1. Location of Bar Island

## 1.2 PURPOSE OF THE PLAN

This Plan specifies the manner in which Bar Island will be used and managed, and the objectives for that use and management. The Plan may also be used to determine priorities for the use of resources and funds, and to guide the carrying out of works.

This Plan has been prepared in accordance with the *Local Government Act 1993*, which requires plans of management to be adopted by Councils for all community land, and the *Crown Lands Act 1989*. Bar Island is recognised as an area of natural and cultural significance and thus requires a specific Plan of Management.

## 1.3 STRUCTURE OF THE PLAN

The plan has been structured into three major areas as follows:

- An introductory section containing background information, statutory planning information and outlining the basis for management, values, objectives, and authorised uses for Bar Island;
- Identification and discussion of the major management issues and appropriate outcomes, actions and performance measures to meet the objectives, and
- An action plan which summarises all the management actions into a table and also allocates responsibilities, priorities and timings to each of these actions.

## 1.4 PROCESS FOR THE PREPARATION OF THE PLAN

The process for the preparation of this plan has included:

- Initial literature review of statutory planning documents and relevant environmental and historical studies and reports.
- Community consultation directly with key stakeholders including representatives from government departments, Aboriginal groups and community representatives (regarding future use, protection of cultural heritage and environmentally sustainable development of Bar Island), an open community meeting and statutory public exhibition of the draft plan.
- A public hearing into the proposed categorisation of the Community land on the Island is required under the Local government Act. This took place during the period of public exhibition of the draft Plan of Management.
- Field investigations regarding matters of natural and cultural heritage of the Island by appropriately qualified consultants.

The Plan was prepared incorporating the findings of the literature review, community consultation and field investigations in order to meet legislative requirements, the stated objectives and desired outcomes for Bar Island.

The following consultants were involved with detailed investigations and contributed to the preparation of this plan:

- **Actinotus Environmental Consultants** investigated the soil, water, vegetation and fauna issues and prepared a Flora and Fauna Assessment Report for Bar Island (refer Appendix B).
- **Edward Higginbotham & Associates** (Archaeologist) investigated cultural heritage issues and prepared a Cultural Heritage Assessment (refer Appendix A) including a review of the 1996 Bar Island Conservation Plan (Jean & Lavelle).
- **Terry Kass** (Historian) prepared a historical report incorporated into the Cultural Heritage Assessment.
- **International Conservation Services** (Julian Bickersteth - Conservator) prepared an Assessment of Condition of Church, Graves and Monuments on Bar Island, appended to the Cultural Heritage Assessment (Appendix A).
- **Pittendigh Shinkfield Bruce** undertook community consultation and preparation of the draft plan of management.

The following people and organisations contributed further information and assistance with the completion of this study:

- Diane Campbell, Hornsby Shire Council
- Tom Richmond, Local Historian
- John Filocamo, Department of Land and Water Conservation
- The Hornsby Council Heritage Committee



### 2.1 LAND COVERED BY THIS PLAN

This Plan applies to all land on Bar Island, Berowra Creek down to the mean high water mark. The area of the Island is 3.84 hectares. The land comprises Lots 22A, 23A and 24 in DP 752040, Bar Island, Berowra Creek (see Figure 2) and Crown land below mean high water mark adjacent to and fronting Lot 22A (the former jetty site).

### 2.2 MANAGEMENT AUTHORITY, OWNERSHIP AND TENURE

For the purposes of this Plan, the management authority is Hornsby Shire Council.

The land is partly owned by Hornsby Shire Council and partly by the Crown. Therefore, the provisions of the *Crown Lands Act 1989* and *Local Government Act 1993* both apply in the preparation of this plan of management.

The northern portion of Bar Island comprising Lots 22A & 23A is under the ownership of Hornsby Shire Council (see Figure 2).

The Crown reserve on Bar Island is Reserve 64999 reserved for the public purpose of Public Recreation notified on 21 December 1934. The reserve comprises Lot 24 DP 752040. The reserve trust is known as the "Bar Island (R64999) Reserve Trust" and Hornsby Council manages this reserve trust.

There are no current leases over the land.

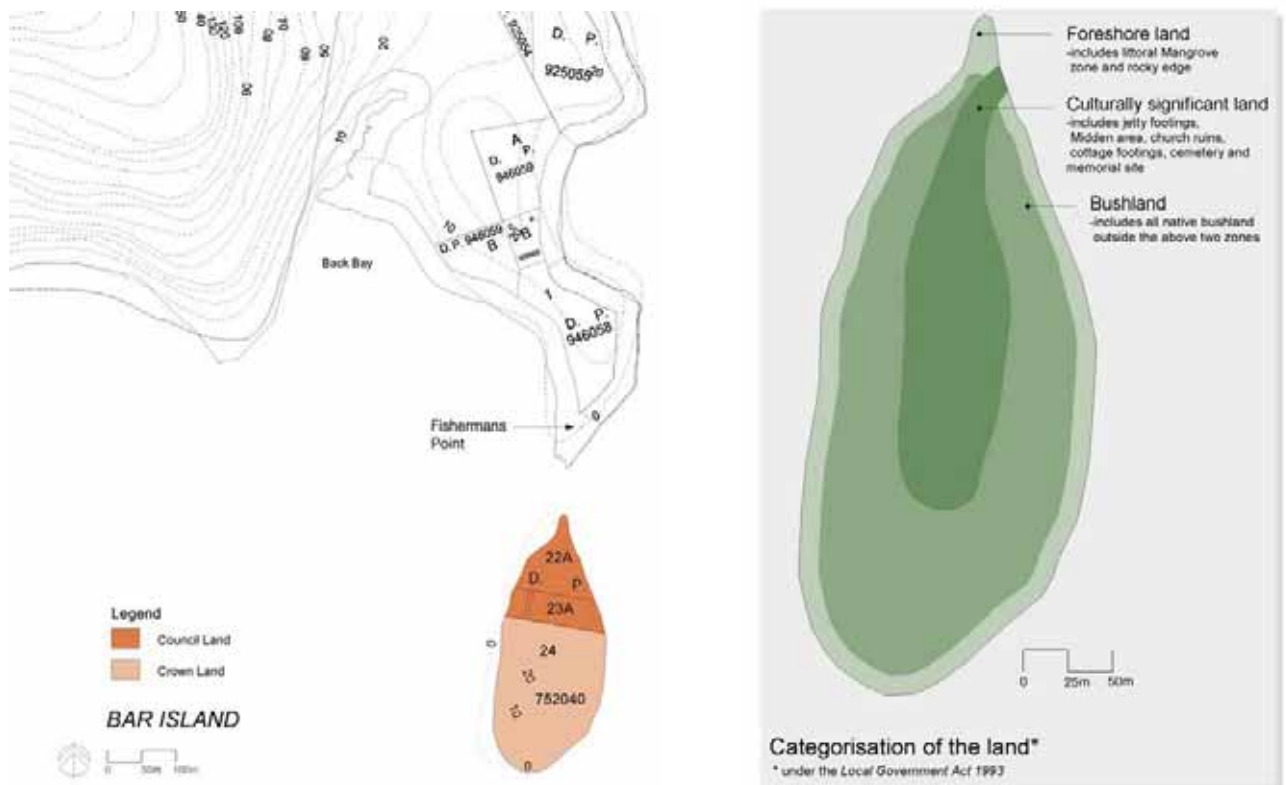


Figure 2. Ownership and categorisation of the land on Bar Island

### 2.3 DESCRIPTION OF THE LAND AND SURROUNDING AREA

Bar Island is a small island located off Fishermans Point at the mouth of Berowra Creek and Marramarra Creek, at their junction with the Hawkesbury River (see Figures 1 & 3). The 3.84 hectare island is covered in relatively intact bushland and rises to a summit in the centre at an elevation of nearly 30 metres.

The Island has a history of early European settlement, reflected today by the historic relics present on the northern side of the Island that was once substantially cleared to allow settlement. The Island supports the ruins of an old church, a graveyard with numerous sandstone headstones, footings of a former cottage and the footings of a former jetty.

A large Aboriginal midden is located at the northern point of the Island.

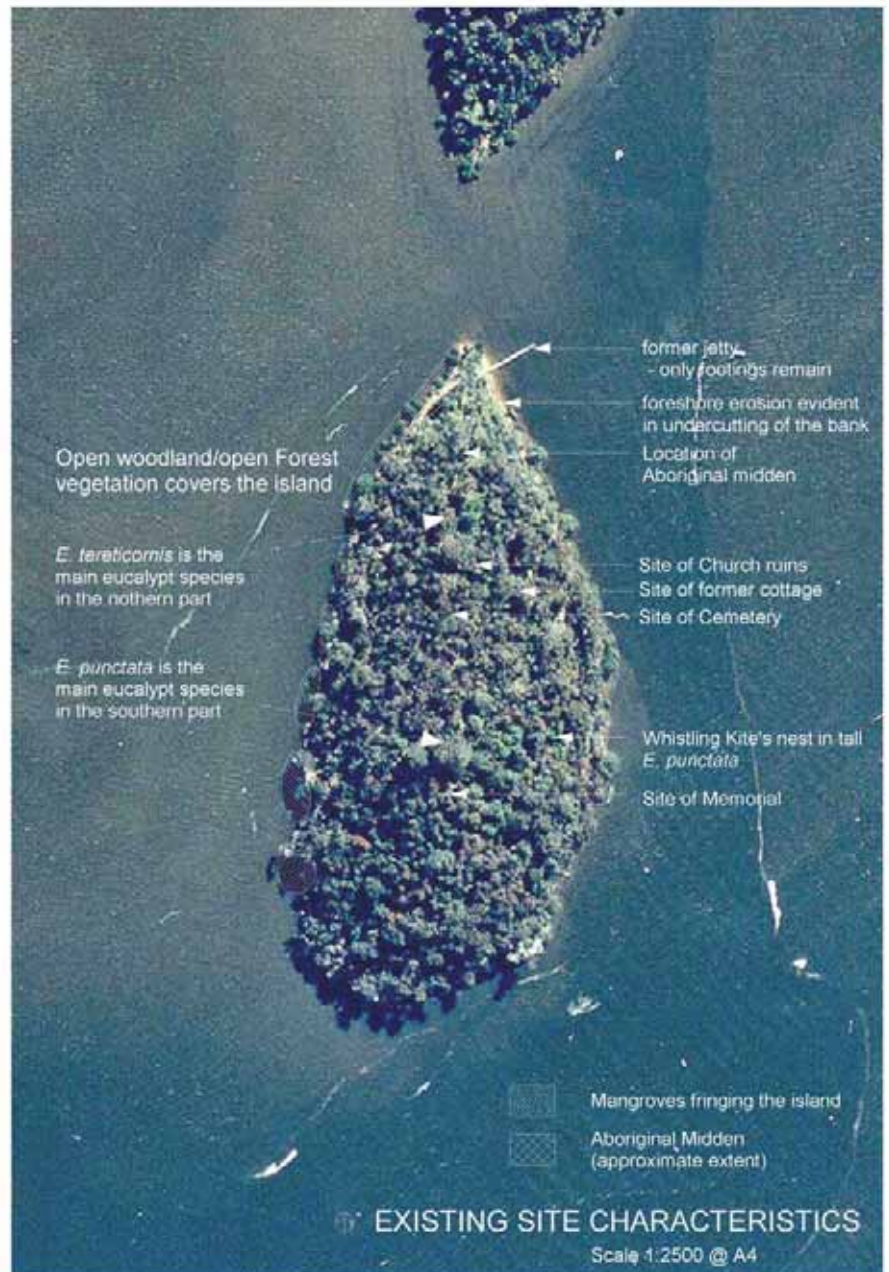


Figure 3. Existing site characteristics

### 2.3.1 Catchment Context

Bar Island is located in the Berowra Creek catchment, within the drowned river valley complex of the Lower Hawkesbury River estuary system, which is part of the Hawkesbury-Nepean River catchment. The estuarine waters surrounding Bar Island are subject to both natural and non-natural inputs and influences, and high volumes of mud washing into Berowra Creek and Marramarra Creek from the Hawkesbury River contribute significantly to the extensive mudflats of Big Bay, Back Bay and other shallow areas in these estuaries (Actinotus Environmental Consultants 2002).



Photo 1. View of the eastern side of Bar Island

### 2.3.2 Topography, Geology and Soils

Bar Island is a roughly convex in shape and the perimeter is mostly surrounded by large boulders and rock formations at the water edge. A small beach occurs at the north-east point of the Island. The summit at the southern end of the Island rises nearly 30 metres from the foreshore of the Island and is characterised by numerous sandstone outcrops.

The underlying geology of the landform of Bar Island is the Newport Formation of the Narrabeen Sandstone Group, which occurs on and around footslopes above saltwater estuaries and the foreshores of local creeks draining into the Hawkesbury River. Soil material from Narrabeen sandstone substrates vary from moderate to deep yellow podzolics on sandstone crests and slopes; moderately deep red podzolics on shale crests and slopes; yellow podzolics on lower shale slopes and gradational yellow earths on footslopes (Appendix B, Actinotus Environmental Consultants 2002).

### 2.3.3 Native Vegetation

The dominant vegetation community occurring on the crest and slopes of Bar Island is described as **Open-woodland/open-forest: *Angophora floribunda* – *Allocasuarina torulosa*** (map unit 9h), part of the Narrabeen Slopes Forest Community (Benson & Howell 1994). Dominant canopy tree species include *Eucalyptus punctata* (Grey Gum) and *Allocasuarina torulosa* (Forest She-oak) with *Angophora floribunda* (Rough-barked Apple) and *Eucalyptus tereticornis* (Forest Red Gum) occurring less frequently. The understorey includes a diverse assemblage of native shrubs and small trees, and a well developed and diverse ground stratum including ferns, herbs, sedges, rushes and grasses. A diverse assemblage of native vines and climbers occurs in association with the groundcovers, shrubs and trees (Actinotus Environmental Consultants 2002).

Other vegetation communities include a small patch of low woodland dominated by *Casuarina glauca* (Swamp She-oak) and also containing saltmarsh species, at the northern point of the Island, and low closed-forest of *Aegiceras corniculatum* (River Mangrove) fringing the Island in parts. For a comprehensive description of the native vegetation of the site refer to the Flora and Fauna Assessment (Appendix B, Actinotus Environmental Consultants 2002).

#### **Plant species of conservation significance**

A population of *Platysace clelandii*, a RoTAP species (Code: 2RCa) occurs on the southern section of the Island. This species is defined as rare and having a restricted distribution, though adequately represented in National Parks and Reserves (Marramarra NP, Wollemi NP, Yengo NP and Parr State Recreation Area). In the Sydney areas the species has been recorded in the vicinity of Berowra Creek, at Mount Orient, Berrilee in 1918 (Actinotus Environmental Consultants 2002).



**Photo 2. Typical open forest vegetation of the Island**

A small population of the tree *Alphitonia excelsa* (Red Ash) occurs on the western section of the Island. This species has a widespread distribution over many parts of Australia but is locally restricted in distribution. The leaves of *Alphitonia excelsa* were used by different Aboriginal communities for many varied purposes including as a skin disinfectant, liniment, gargle for toothache, tonic drink (Robinson 1991) and in the Hornsby area as a fish poison (Lembit 2002 - Campbell *pers. comm.*)(Actinotus Environmental Consultants 2002).

**Narrabeen Slopes Forest** is considered significant within the Hornsby Local Government area. This particular assemblage of Narrabeen Slopes Forest on Bar Island includes a range of canopy, understorey, twiner, vine and ground cover species, the composition apparently related to aspect and fire history. This assemblage is considered diverse compared with most other plant communities in the Hornsby Shire (Lembit 2002, Campbell *pers. comm.*) (Actinotus Environmental Consultants 2002).

**Saltmarsh**, of which a small area occurs on Bar Island, is considered regionally significant (Actinotus Environmental Consultants 2002).

#### **2.3.4 Fauna and Habitat**

Numbers of fauna identified by recent assessment (Appendix B, Actinotus Environmental Consultants 2002) were not high, possibly due to the survey being undertaken in winter months.



The open woodland on the Island provides potential habitat for numerous terrestrial and arboreal fauna species, including canopy habitat for birds and mammals. Many of the older specimens of *Allocasuarina torulosa* contain hollows, which could be utilised by small birds, and mammals such as possums and microbats.

The most numerous faunal group on Bar Island are birds with the Noisy Minor (*Manorina melanocephala*) being the most prolific species. A pair of resident whistling kites, currently with a juvenile, inhabit a large stick nest high in a tall *Eucalyptus punctata* (Grey Gum) on the eastern side of the Island (see Figure 3).

Both the Ring-tailed Possum (*Pseudocheirus peregrinus*) and Brush-tailed Possum (*Trichosurus vulpecula*) have been recorded on the Island and there have been unconfirmed reports of Long-nosed Bandicoots (*Perameles nasuta*) inhabiting the Island (Flannery *pers. comm.*).

The foreshore areas, which include mangrove and saltmarsh habitat, and mudflats uncovered at low tide, are inhabited by a diversity of invertebrate species including molluscs, crabs, insects and arachnids. Refer to the Flora and Fauna Assessment for a comprehensive description of the fauna of Bar Island (Actinotus Environmental Consultants 2002).

#### **Fauna species of conservation significance**

Although no threatened fauna species were recorded, there are three species that have real potential to utilise Bar Island in their foraging range. These are:

- **Glossy Black Cockatoo** (*Calyptorhynchus lathami*) – Bar Island is prime habitat, due to the abundance of *Allocasuarina torulosa*. The Glossy Black Cockatoo feeds almost exclusively on the fruit of this species.
- **Regent Honeyeater** (*Xanthomyza phrygia*) – A rare winter visitor that feeds on winter flowering Eucalypts and Banksias.
- **Grey-headed Flying Fox** (*Pteropus poliocephalus*) – The species is highly mobile and occurs throughout the Sydney region, foraging over a large home range, in response to patchy food distribution and may visit Bar Island when eucalypts are in full blossom.

Additionally, Bar Island may provide potential habitat for Great Pipistrelle, Eastern Little Mastiff Bat, Yellow Bellied Sheath-tail Bat & Greater Broad-nosed Bat.



**Photo 3. Foreshore habitat**

### 2.3.5 Aboriginal Cultural Heritage

Aboriginal people knew Bar Island as Marra Marra and their frequent visitation and use of the Island is evidenced by a large midden at the northern point of the Island along with two directional marker stones and a number of stone artefacts. Stone artefacts can be seen weathering out of the foreshore midden material (Gallard 2002; see Appendix A, Cultural Heritage Assessment, plates 3.3 & 3.4). The site is listed on the Aboriginal Sites Register, held by the NSW National Parks and Wildlife Service.

Consultation was undertaken with Aboriginal groups in accordance with Section 20 of the Local Government Regulation 1999, regarding Council's preparation of a Plan of Management for Bar Island, concerning categorisation of the land as an area of cultural significance and whether or not the land is an area of Aboriginal significance.

Written notice was given to the Metropolitan Local Aboriginal Land Council and to the Darkinjung Aboriginal Land Council, an advertisement was placed in a newspaper circulated across the State primarily concerned with issues of interest to Aboriginal people - Tunggarre



**Figure 4. Painting of the indigenous people of the Hawkesbury River area.**

News, and a written notice was placed on the land in a position where the notice was visible to any person on adjacent public land.

The notice called for submissions to be made to the Council within 28 days on relation to the Council's consideration by any Aboriginal person traditionally associated with the area.



In addition to the formal consultation, additional consultation (by letters, site visits, phone calls and emails) was held with other Aboriginal groups, organisations and individuals, namely the Darug Tribal Aboriginal Corporation, the Darug Custodian Aboriginal Corporation, the National Parks and Wildlife Service, the Hornsby Area Residents for Reconciliation, Dr Jim Kohen (Macquarie University), and a descendent of Granny Lewis, Mrs Lyn Stewart.

Written responses were received from the Darkinjung Local Aboriginal Land Council who registered an interest in the site, from the Darug Custodian Aboriginal Corporation indicating that Bar Island contained significant evidence of Aboriginal occupation and was a sacred place for the Darug and Darkinjung dreaming for the past, present and future, from Dr Jim Kohen regarding the genealogical evidence for Aboriginal people on Bar Island and the National Parks and Wildlife Service regarding groups with which to consult.

The Island has been described by the attendants at the site inspection as having very considerable significance to the Darug and Darkinjung communities. Mr John Gallard, Sites and Research Officer of the Darug Custodian Aboriginal Corporation has made the following comments in a letter to Hornsby Shire Council (2002):

*"We landed at the old jetty site and I immediately recognised the large midden site, this site contains stone tool artefacts which can be seen weathering out of the foreshore material."*

*"The Island forms a recognisable part of what is defined as the eastern boundary of Darug land. On the summit area is a single marker which points up the main arm of the river and marks the junction between Darkinjung Country and Darug Country. This Island was in fact a meeting place and a shared resource between both communities."*

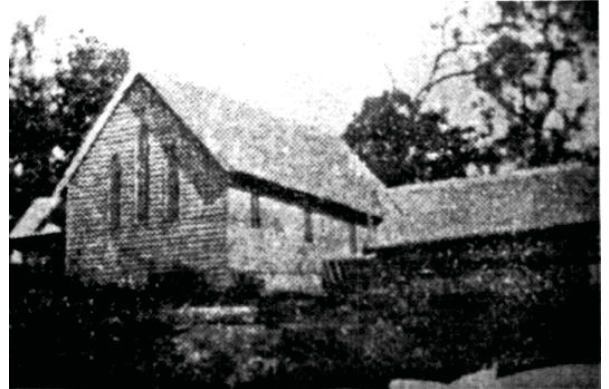
*"The Bar Island is an important part of Darug Darkinjung Aboriginal Communities dreaming, past, present and future. It is a burial place for both Aboriginal and Pioneer People of European and Mixed Blood. It contains Cultural Heritage that spans an enormous bridge of time and as such is a sacred place, a place for quiet enjoyment, reflection and contemplation. It is also an Archaeologically unique Heritage Site and great respect and care should be given to its management."*

*"We as members of the Traditional Custodians and Owners wish to share in that role."*

### 2.3.6 European Cultural Heritage

Evidence of historical settlement remaining on the Island include a jetty, a rock inscription on the pathway from the jetty, ruins of the church, the site of a small cottage, the cemetery and a memorial lookout on the summit.

Bar Island cemetery, church ruins and memorial are listed as heritage items of regional significance in the Hornsby LEP. These items were identified as items of non-Aboriginal heritage in SREP No. 20. The site is also classified by the National Trust of Australia (NSW).



**Photo 4. Historical photo of the former church on Bar Island**

The Cultural Heritage Assessment of Bar Island (Edward Higginbotham and Associates October 2002) includes a synopsis of the historic background of the Island, a survey of remaining physical evidence of the Island's history, a statement of cultural significance of the Island, a description of constraints, opportunities and other statutory requirements and a conservation policy for the management of the cultural resource. Of direct relevance to this Plan of Management are the Statement of Significance and the Conservation Policy. The former is included in the Statement of Significance for Bar Island (section 4.3) and the latter has been summarised as a series of actions in the Action Plan (section 7).

#### The Cemetery

The cemetery is located on the northern part of the island. Access is from the jetty at the northern point, along a path that crosses the Aboriginal midden and the inscribed rock, before reaching and passing through the church and former cottage site. The cemetery is gradually becoming overgrown by bushland. The cemetery covers an area of approximately 20 metres east to west and 30 metres north to south, with the graves nominally facing east-west. The grave monuments form two main clusters within the cemetery on each side of a central path, that leads on up to the memorial site on the summit of the island (Higginbotham & Associates 2002). 31 burials have been identified by site survey, however, there are records of 58 burials and there may be 3-4 other burials (Richmond 2002b, in Higginbotham & Associates 2002).



**Photo 5. Graves in the cemetery on Bar Island**

#### The Church

Only the stone chimney remains of the former timber church built on the Island in 1876. The chimney formed the end wall of the vestry.

### The Jetty

The jetty is first shown on a plan dated to 1878, however the current jetty footings were built in 1972 to replace the previous structure. The structure has little heritage significance other than it denotes continuous use of the location for a jetty since the 1870s (Higginbotham & Associates 2002).

### The Memorial

The Sandell and Buckman Memorial on the summit of the Island was built in memory of two Outward Bound instructors who accidentally drowned while rescuing students from the Hawkesbury River. The crescent shaped sandstone monument has been integrated into the natural bushland setting.



Photo 6. The Sandell and Buckman memorial

### Aspects of local heritage significance

- Evidence of historical settlement on the Lower Hawkesbury River.
- Bar Island provided spiritual and educational facilities for the early river community.
- The cemetery monuments indicate a range of work by monumental masons from the Sydney area, and a comparative sample of monumental masonry.
- Potential to reveal important historical information not available from other sources.

### Aspects of state heritage significance

- The cemetery provides evidence for the genealogy of the local community.
- Bar Island is the burial place of "Granny Lewis" (Sarah Wallace/Lewis/Ferdinand) who was of Aboriginal descent and was a link between many early families in the district.
- Strong oral traditions associating the poet Henry Kendall with Bar Island. It is believed that Kendall wrote a poem for one of the children, Maud Lloyd, buried on the island.
- The riverine focus of the Lower Hawkesbury community, resulting in the choice of an island for a place of worship, burial and education, is extremely unusual in NSW.



Photo 7. View of cemetery in 1970s with a furniture shed still standing (photo courtesy Tom Richmond)



Photo 8. Steps (currently overgrown) leading up from the wharf (photo courtesy of Tom Richmond)

## **2.4 CONDITION OF THE LAND AND STRUCTURES**

### **Native Vegetation**

The native vegetation on Bar Island is in a relatively undisturbed state with minimal weed invasion around the midden and landing area and within the understorey vegetation. Due to the absence of fire from the Island in recent times, some natural succession of the vegetation community is occurring towards more rainforest species and a well developed assemblage of climbers.

The northern section of the Island was substantially cleared from the mid-1800s by European settlement activities but since occupation of the Island ceased, substantial regeneration has occurred.

### **Foreshore Erosion**

A small amount of foreshore erosion caused by wave action undercutting the soft sandy bank has occurred in the north-east corner of the Island near the jetty footings.

### **Rubbish**

Rubbish and debris are evident on the Island especially around the northern point where most human disturbance has occurred. This includes rubbish and debris washed up onto the shore, rubbish left by visitors to the Island and the old planks of the former jetty that have been left on the banks of the Island.

### **Cultural Heritage Items**

The Cultural Heritage Assessment (op cit Appendix A, Higginbotham and Associates) includes an inventory and condition assessment of the items of cultural heritage remaining on the Island. This is reproduced below as Table 1.

The 1996 Conservation Plan included an inventory of sites on Bar Island. The numbering system of the 1996 Conservation Plan is reused in this report. One site was not recorded in 1995, namely the inscription on the rock on the pathway to the Cemetery. The condition of the grave markers and church / vestry fireplace was assessed in detail by Julian Bickersteth, International Conservation Services (2002).

Inventory	Item name	Current condition
01	Timber Jetty	Since 1995 the timber decking of the jetty has been removed. Otherwise the stone and concrete supports for the jetty appear to be in similar condition to 1995 survey.
02	Aboriginal Midden	The current condition of the midden appears little changed from 1995. There is current erosion of the midden and soil deposits on the foreshore near the jetty. The surface of the midden is still being eroded by the pathway to the cemetery.
# <sup>1</sup>	Rock Inscription	A large slab of natural sandstone is located on the pathway, approximately half way between the jetty and the church. On its smooth, slightly sloping surface is a hand cut inscription, namely "H E BRITTEN" in capital letters. This appears to refer to the wife of H. H. Britten, the minister for St. John's on Bar Island.  The inscription is on the pathway and is used as a stepping stone to gain access along the pathway. Eventually the inscription may be eroded away by this action.
03 and 03.01	Former Church Site	The condition of the chimney, which formed a wing of the church, appears to have deteriorated in condition since 1995, with some new masonry collapse.  Research by Tom Richmond has clearly indicated that the sandstone chimney formed the end wall of the Vestry, attached at right angles to the north side of the Church at its western end. The entrance porch to the church was located on the south side of the building, towards its eastern end.  The site of the church building remains in a similar condition to the 1995 survey.  The location of the flagpole can still be discerned. This was erected after the church was demolished.
04	Cemetery	Gravestones and / or markers were numbered 04.01 through to 04.27 in the 1996 Conservation Plan.  Investigation by Julian Bickersteth has indicated that most gravemarkers are similar in condition to the original survey in 1995, carried out for the 1996 Conservation Plan (see Appendix A for details).  Exceptions include:  04.14. Paintwork faded and almost illegible.  04.27. Headstone has fallen over since 1995 and is now in 2 pieces.
05	Former Cottage Site	Stone footings of a possible fireplace were noted in an area complying with the description of the site in 1995. No periwinkle was observed.  The site does not appear to have deteriorated in condition.
06	Sandell and Buckman Memorial	The Memorial has deteriorated in condition since 1995 (see Appendix A for details).

**Table 1. Condition of cultural heritage items on Bar Island**

<sup>1</sup> Site not located during original survey.



## 2.5 SITE USAGE AND CONTEXT

Bar Island is a recreational resource for local residents in the surrounding river settlements, for recreational boat users and a rest spot for kayaking and canoeing groups on the Hawkesbury River. It is also an important historical and cultural resource and is frequently used by local historical societies and people with links to the Islands past history. Bar Island has been a popular destination for picnickers dating from the 1870s (Jean & Lavelle 1996).



**Photo 9. Current signage showing restrictions on land use**

on the east and west side of the Island and to the north around Fishermans Point (Hornsby Shire Council 1993).

Bar Island is situated in the context of a largely natural area with low levels of residential development in the nearby river settlements, and is proximate to other natural areas within Marramarra National Park and Muogamarra Nature Reserve. Bar Island is a distinctive landmark when viewed from the Hawkesbury River and adjacent lands.

Public access to the Island is currently unrestricted, although overnight camping is prohibited. The Island is only accessible by boat to a landing area at its north-east corner. Use of Bar Island at present is largely for informal passive recreational activities. Since the jetty was removed due to safety concerns, access to the Island has become more difficult and thus the recreational usage of the Island has reduced. The Island is also used illegally for overnight camping occasionally, even though there has been signage erected to prohibit this practice (See Photo 9).

The waters surrounding Bar Island are used for recreational boating and general river transport, prawn trawling and commercial fishing. Oyster leases occur



**Photo 10. Former church site showing protective fencing**



### 3.1 LOCAL GOVERNMENT ACT 1993

#### Background

The *Local Government Act 1993* contains regulations regarding plans of management and prescribes guidelines for the categorisation of community land under Section 36 and Section 37 of the Act.

The council owned land in the northern part of the Island is community land according to the definition in Chapter 6, Part 2 of the *Local Government Act 1993*. It is Council policy to prepare plans of management for Crown reserves for which Council is the land manager to ensure a uniform plan of management of open space within Hornsby Shire (Hornsby Shire Council, significant Areas – Bushland, Plans of Management and Action Plans, April 2000). Hence this plan of management applies to the Crown land under Section 37 of the Act.

#### Categorisation

Section 36(4) of the *Local Government Act 1993* requires community land to be categorised, to reflect land use and/or to describe the physical characteristics of the land. The Crown land has also been categorised in the same manner as it is under the care, control and management of Hornsby Shire Council and will be managed under this Plan of management.

The community land on Bar Island has for, the purposes of the Plan, been categorised as either a **natural area** or as an **area of cultural significance** (refer Figure 2). This is because the dominant physical characteristics of the land relate to the Island being a significant landform; the native vegetation and habitat features; and the significant aboriginal, aesthetic, archaeological and historical elements.

Community land categorised as a **natural area** has been further categorised as **bushland** and **foreshore**<sup>2</sup>. This is because the natural features of the Island comprise mostly undisturbed bushland and areas at the water's edge forming a transition zone between the aquatic and terrestrial environments.

#### Core Objectives

The Act also sets out the core objectives of each particular category. The significance of the prescribed core objectives is that a lease, license or other estate cannot be granted in respect of the land if it would defeat those objectives.

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

- a) to conserve biodiversity and maintain ecosystem function in respect of the land, or the feature or habitat in respect of which the land is categorised as a natural area, and

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<sup>2</sup> Following section 36(5) *Local Government Act 1993*

- b) to maintain the land, or that feature or habitat, in its natural state and setting, and
- c) to provide for the restoration and regeneration of the land, and
- d) to provide for community use of and access to the land in such a manner as will minimise and mitigate any disturbance caused by human intrusion, and
- e) to assist in and facilitate the implementation of any provisions restricting the use and management of the land that are set out in a recovery plan or threat abatement plan prepared under the *Threatened Species Conservation Act 1995* or the *Fisheries Management Act 1994*.

**The core objectives for management of community land categorised as bushland are:**

- a) to ensure the ongoing ecological viability of the land by protecting the ecological biodiversity and habitat values of the land, the flora and fauna (including invertebrates, fungi and micro-organisms) of the land and other ecological values of the land, and
- b) to protect the aesthetic, heritage, recreational, educational and scientific values of the land, and
- c) to promote the management of the land in a manner that protects and enhances the values and quality of the land and facilitates public enjoyment of the land, and to implement measures directed to minimising or mitigating any disturbance caused by human intrusion, and
- d) to restore degraded bushland, and
- e) to protect existing landforms such as natural drainage lines, watercourses and foreshores, and
- f) to retain bushland in parcels of a size and configuration that will enable the existing plant and animal communities to survive in the long term, and
- g) to protect bushland as a natural stabiliser of the soil surface.

**The core objectives for management of community land categorised as foreshore are:**

- a) to maintain the foreshore as a transition area between the aquatic and the terrestrial environment, and to protect and enhance all functions associated with the foreshore's role as a transition area, and
- b) to facilitate the ecologically sustainable use of the foreshore, and
- c) to mitigate impact on the foreshore by community use.

**The core objectives for management of community land categorised as an area of cultural significance are:**

- 1) to retain and enhance the cultural significance of the area (namely its Aboriginal, aesthetic, archaeological, historical, technical or research or social significance) for past, present or future generations by the active use of conservation methods.
- 2) those conservation methods may include any or all of the following methods:
  - a) the continuous protective care and maintenance of the physical material of the land or of the context and setting of the area of cultural significance,

- b) the restoration of the land, that is, the returning of the existing physical material of the land to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material,
  - c) the reconstruction of the land, that is, the returning of the land as nearly as possible to a known earlier state,
  - d) the adaptive reuse of the land, that is, the enhancement or reinforcement of the cultural significance of the land by the introduction of sympathetic alterations or additions to allow compatible uses (that is, uses that involve no changes to the cultural significance of the physical material of the area, or uses that involve changes that are substantially reversible or changes that require a minimum impact),
  - e) the preservation of the land, that is, the maintenance of the physical material of the land in its existing state and the retardation of deterioration of the land.
- 3) A reference in subsection (2) to land includes a reference to any buildings erected on the land.

This Plan has taken into account these core objectives in the development of specific management objectives for Bar Island (section 5.1).

### **3.2 CROWN LANDS ACT 1989**

The use and management of the Crown land on Bar Island must be in accordance with the principles of Crown land management as set out in section 11 of the *Crown Lands Act 1989*. These principles are as follows:

- To observe environmental protection principles in relation to the management and administration of Crown land;
- To conserve wherever possible, the natural resources of Crown land (including water, soil, flora, fauna and scenic quality);
- To encourage appropriate public use and enjoyment of Crown land;
- To encourage multiple use of Crown land;
- To use and manage Crown land in such a way that both the land and its resources are sustained in perpetuity where appropriate;
- To deal with Crown land in the best interests of the State consistent with the above principles.

Additionally, its uses, activities, developments and agreements must be broadly defined by the purposes of the reservation. The types of public purposes used for reserving Crown land under the *Crown Lands Act 1989* are listed in Table 2 and these broadly define the uses and activities permissible on Crown lands. It is permissible to reserve Crown land for one or any number of purposes within this list.

### Case Law

In addition to the above described provisions, land uses on Crown lands are influenced by case law judgements. With respect to land reserved for Public Purposes, in essence the case law currently requires that any use must be conducive and ancillary to the Reserve's public purpose.

In order to change a reservation, a land assessment is required under the *Crown Lands Act 1989*. This can be waived if the new reserve purpose is considered to be consistent with the Principles of Crown Land Management (section 11) and it is in the public interest to do so.

NO.	PURPOSE AND DATE OF GAZETAL
	Gazetted 15.12.59
1	Access
2	Accommodation
3	Caravan Park
4	Community Purposes
5	Environmental Protection
6	Government Purposes
7	Heritage Purposes
8	Public Recreation
9	Public Recreation and Coastal Environmental Protection
10	Rural Services
11	Showground
12	Travelling Stock
13	Urban Services
14	Water
15	Dedicated – Public Park
16	Acquired – Future Public Requirements
	Gazetted 22.5.92
17	The Accommodation, Guidance, Education and Welfare of Homeless or Needy Young Persons
	Gazetted 2.9.94
18	Public Entertainment
19	Public Amusement
	Gazetted 24.3.95
20	Tourist Facilities and Services
21	Community and Sporting Club Facilities
22	Recreation Facilities and Services
23	Aquatic Sporting Services
	Gazetted 17.11.95
24	Port Services and Facilities
	Gazetted 27.3.98
25	Racecourse and Recreation Facilities

**Table 2. Purposes for which Crown land may be used.**

### Permissible use of Bar Island

As part of Bar Island is Crown land reserved for public recreation, the use and access to it are defined by legislation, case law and departmental policy and practice. The current use of the reserve for informal passive recreational purposes is conducive and ancillary to the reservation.

However, as the land has significant natural and heritage values, the current reservation of the land for public recreation, does not necessarily afford protection to these values. As the

natural and heritage values of the land warrant extra protection it is recommended that additional purposes be gazetted for the land. The appropriate purposes would be Environmental Protection and Heritage Purposes.

### **3.3 OTHER RELEVANT LEGISLATION AND POLICIES**

Council is required to comply with all relevant legislation that applies to the use and management of Bar Island. This means that this Plan of Management is required to be consistent with the planning and assessment provisions of the *Environmental Planning and Assessment Act 1979* and the relevant sections of the following acts, policies and plans:

#### **State Government Legislation**

##### ***Threatened Species Conservation Act 1995***

It is Council's responsibility to manage threatened species, populations and ecological communities under the provisions of this Act. This includes the assessment of the impact of development activities on threatened species, populations, ecological communities and their habitat and incorporation of the provisions of Threat Abatement Plans and Recovery Plans into Council's management processes.

Although at present no recovery plans or threat abatement plans affect Bar Island, recovery plans may place binding obligations on Council in relation to Council owned land. If Council is identified in a recovery plan as being responsible for measures contained within it, it must include information on the relevant action in its State of the Environment reporting. There are also provisions in the *Local Government Act 1993* specifying particular requirements for plans of management for community land that is directly affected by a recovery plan (Land & Environment Planning & Environs Australia, 2001).

##### ***Fisheries Management Act 1994***

This Act deals with matters relating to the dredging of waterways and the reclamation of land on a catchment wide basis for the management and conservation of aquatic habitat. Threatened species provisions for aquatic environments are contained in Part 7A of the Act and mirror those provisions of the *Threatened Species Conservation Act* including the preparation of recovery plans and threat abatement plans.

##### ***Heritage Act 1977***

The requirements of the Act with respect to protection of historical archaeological resources are outlined in Section 5 of the Cultural Heritage Assessment report (op cit Higginbotham & Associates). In brief, the Act protects all European sites and relics and if disturbance of an archaeological site or relic is proposed, then Heritage Council consent is required.

##### ***National Parks and Wildlife Act 1974***

Under the National Parks and Wildlife Act 1974, the National Parks and Wildlife Service (NPWS) is responsible for the protection and preservation of aboriginal relics in New South Wales. All Aboriginal sites and relics are protected under this act and must not be disturbed without the consent of the NPWS. The requirements of this Act are also outlined in further detail in the Cultural Heritage Assessment report (op cit Higginbotham & Associates).

**Sydney Regional Environment Plan No. 20 Hawkesbury-Nepean River (No. 2-1997)**

This aim of this plan is to protect the environment of the Hawkesbury Nepean River system by ensuring that the impacts of future land uses are considered in a regional context. The Regional Environmental Plan provides provisions for a Total Catchment Management approach to planning within the catchment.

The plan contains policies and strategies relating to cultural heritage, flora and fauna, riverine scenic quality, and recreation and tourism, which are relevant to the future use and management of Bar Island. Further, the plan contains additional matters for consideration by consent authorities for development involving recreational facilities, land use in or near the river, and land use in riverine scenic areas, which would relate to any proposed use or development of Bar Island.

The Action Plan for the Hawkesbury-Nepean Environmental Planning Strategy (DUAP, 1997) contains actions necessary to implement the policies and strategies set out in SREP 20 to improve existing environmental conditions within the Hawkesbury-Nepean River Catchment. It is divided into two sections, Part A contains actions that relate directly to the use of the SREP 20 as a statutory instrument and Part B contains all actions relating to catchment management.

In particular, the action plan contains actions to protect areas of state and regional riverine scenic significance and minimise access points to minimise the environmental impact of access points to the river through careful design and location.

***Catchment Management Act 1989***

The objects of this Act are:

- to co-ordinate policies, programs and activities as they relate to total catchment management;
- to achieve active community participation in natural resource management;
- to identify and rectify natural resource degradation;
- to promote the sustainable use of natural resources, and
- to provide stable and productive soil, high quality water and protective and productive vegetation cover within each of the State's water catchments.



The Act provides for a network of Catchment management committees, and Catchment Management Trusts linking the Government and the community to achieve the objectives of total catchment management; and provides for Catchment Management Trusts to raise revenue for particular total catchment management purposes. In 2000, 43 of 45 catchment management committees were replaced by 18 Catchment Management Trusts (Boards)

The *Catchment Management (CM) Act 1989* defines Total Catchment Management as:

‘co-ordinated and sustainable use and management of land, water, vegetation and other natural resources on a water catchment basis so as to balance resource utilisation and conservation’.

#### **Catchment Blueprint**

A blueprint was approved by Cabinet in 2002 for the Hawkesbury Lower Nepean catchment. Bar Island lies within this catchment. The Blueprint is State government policy, and sets the overarching natural resource priorities for the catchment. This Plan is consistent with the Blueprint.

#### **Rivers and Estuaries Policy**

The State Rivers and Estuaries Policy prepared under the Catchment Management Act, provides for the preparation of Estuary Management Plans according to the NSW Estuary Management Manual process. This plan is consistent with the Berowra Creek Estuary Management Plan.

#### **Noxious Weed Act 1993**

Under provisions of this Act, council is responsible for the control of weeds on public land and land owned by council. The Act provides for the identification, categorisation and control of noxious weeds.

#### **Other Plans and Policies**

**NSW Fisheries has developed a Habitat Protection Plan No 3 The Hawkesbury-Nepean River System**, which helps authorities to recognise their responsibilities for the protection of fish habitat within the Hawkesbury-Nepean catchment.

**NSW Fisheries Policy and Guidelines: Aquatic Habitat Management and Fish Conservation** contains general policies for the conservation of fish, marine vegetation and aquatic habitat. Further, the document contains guidelines for the undertaking of any works in the aquatic zone in order to meet the policy requirements. This includes guidelines for dredging and reclamation, which requires a permit from NSW Fisheries before any works are undertaken.

### **Commonwealth Legislation**

#### ***Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)***

The EPBC Act relates to biodiversity conservation issues of national interest. It provides the framework for environmental assessment of projects having national importance, and the listing of nationally endangered species. The EPBC Act identifies several matters of national environmental significance, including nationally threatened species and communities, migratory species, wetlands protected under the Ramsar Convention and world heritage areas. Development proposals require assessment and approval under the Act where they are assessed as being likely to have a significant impact on such matters.

Actions requiring approval under the EPBC Act do not include the preparation of plans, agreements or the issuing of approvals, but may include physical activities that follow from these. One specific implication of the EPBC Act for biodiversity planning is that impacts on threatened species must be assessed separately under both Commonwealth and State legislation using different criteria (Land & Environment Planning and Environs Australia 2001).

### **Hornsby Council Plans**

#### **Hornsby Shire Local Environmental Plan (LEP) 1994**

The whole of Bar Island is zoned as Open Space A (Public Recreation – Local) under the LEP. The LEP sets out in general terms what kinds of developments are permissible within a zone, either with or without Council's consent.

The use of Bar Island is required to meet the objectives of the zoning as Open Space A, which are:

- a) To ensure there is provision of adequate open space to meet the needs of the community and to enhance the environmental quality of the Hornsby area.
- b) To encourage a diversity of recreational settings and facilitates.
- c) To protect and preserve areas of urban bushland which are considered valuable in terms of their ecology.

For the Open Space A zoning the following uses are permissible:

- 1) Without development consent
  - bushfire hazard reduction (except ancillary buildings), gardening, landscaping, exempt development.
- 2) Only with development consent
  - agricultural structures, agriculture, buildings ancillary to bushfire hazard reduction, gardening and landscaping, camp or caravan sites, car parks, cemeteries, child care centres, communication facilities, community facilities, dams, demolition, entertainment facilities, forestry, intensive animal establishments, intensive horticultural establishments, public buildings, recreation areas, recreation facilities, utility installations.

## 3) Prohibited

- development that is not permitted without development consent or permitted only with development consent.

Bar Island contains heritage items of regional significance listed under Schedule D of the LEP. These are the cemetery, church and memorial. Heritage provisions in the LEP state in principle, that Council must take into consideration the extent to which any development would affect the heritage significance of a heritage item.

Other council plans and policies that need to be considered:

- Sustainable Water Development Control Plan (DCP)
- Heritage Development Control Plan
- River Settlements Development Control Plan
- Exempt and Complying Development Control Plan
- Community Uses Development Control Plan
- Bushland (Natural Areas) Plan of Management

Two other important plans that have been taken into consideration in the preparation of the Plan of Management are:

- Bar Island Conservation Plan (Jean & Lavelle 1996), and
- Berowra Creek Estuary Management Study and Estuary Management Plan (Webb McKeown & Associates 2000)

#### 4.1 HISTORICAL BACKGROUND

The following information has been largely summarised from the historical report researched and written by Terry Kass (historian) and included in the Cultural Heritage Assessment (Appendix A, Higginbotham & Associates 2002).

Aboriginal people knew Bar Island as Marra Marra and their frequent visitation and use of the Island is evident from the large midden at the northern point and by stone artefacts uncovered on the Island.

It is not known who were the earliest European users of the Island. In 1862 Bar Island was included in a blanket reservation by the Crown of the banks of rivers and islands within rivers. However, the accessibility of Bar Island and the paucity of other places to settle on this rocky stretch of the river meant that it attracted attention.

Bar Island became a centre for community activity for the surrounding river settlements when a church was built on the Island in 1876. Reverend Henry H Britten of Castle Hill, the Anglican minister servicing this large parish, requested permission to erect a small building on the Island to use as a church. Approval to erect the building was granted on 2 August 1876 and a church was duly built of weatherboards with a stone chimney. The first service was held in the newly completed Bar Island church on 26 October 1876.

With the closing of the school at nearby Peat's Ferry in 1876, Britten offered to permit the school to operate in the church on Bar Island, which was duly accepted. The Bar Island School operated from 1877 until its closure in 1892. This was primarily due to the shift in settlement to the area eastwards to what soon became the Village of Brooklyn as a result of work on the causeway to the Hawkesbury River Bridge, and the establishment of the railway camp near the bridge. The School reopened briefly from January 1901 to July 1903.

The earliest known interment in Bar Island cemetery was that of 5 month old Caroline Mary Banks, who died on 20 August 1879 and was buried there on 23 August 1879. This was before the official gazettal of the site as a cemetery, which occurred on 11 March 1881 and there may have been even earlier burials.



**Photo 11. Remains of Church wall**



**Photo 12. Church service 1939  
(photo courtesy of Tom Richmond)**

The year 1880 proved to be a notable one. On 1 October 1880, Maud Lloyd, a three week old baby, died and was buried on Bar Island by her father, storekeeper, Richard Lloyd. Henry Kendall, the poet, who was working on mail deliveries for the Fagan family of Gosford, was acquainted with the Lloyd family. There is some evidence that this burial at Bar Island and the consequent grief of the family inspired the Henry Kendall poem, entitled "On A Baby Buried by the Hawkesbury" (Richmond 2002a).

On 6 November 1880, the death occurred of Sarah Ferdinand (also known as Granny Lewis), who is believed to have been the last full-blooded Aboriginal person on Berowra Creek. She was buried at Bar Island cemetery, but the exact location of her grave is not known.

By the beginning of the twentieth century, the Church building was in a dilapidated state. There are various tales attributing the cause of its decay to a range of causes, from normal wear and tear, lack of maintenance, vandalism, and a fierce storm in 1887. It subsequently became a ruin. Now only the more substantial elements, such as the stone chimney, remain.

#### 4.2 COMMUNITY VALUES

Values are attributes that are highly regarded or important to people.

Community values for Bar Island have been gleaned through consultation with a number of community representatives, and from a community meeting held at Mooney Mooney on Saturday 14<sup>th</sup> December 2002, chaired by Councillor Steve Russell and attended by 18 people (see Appendix C). Characteristics and values of Bar Island expressed include:

- visual quality
- historical importance
- spiritual importance
- natural environment
- accessibility
- remoteness
- wildness
- solitude



**Photo 13. Grave of Francis J. Byrnes, Aged 6, 1887**

*"the most picturesque of the islands of the Hawkesbury"*

*"the flora and fauna of the Island are unique"*

*"rich with evidence of former Aboriginal and European occupation"*

*"it is the slow dignified decay of the European presence that gives Bar Island so much of its value"*

*"Bar Island is a very important part of the local heritage" and "history of the Hawkesbury"*

*"there has been a significant Aboriginal presence on Bar Island in the past"*

*"the Island needs to be accessible to people with a genuine interest in the historical values"*

*"the solitude, history and beauty of Bar Island should be maintained"*

*"a beautiful secluded spot"*

*"a sacred place"*

*"a place for quiet enjoyment, reflection and contemplation"*

*"in its present state the Island holds no value to the community"*

There is a divergence in the community of views as to what is desirable and appropriate for Bar Island in terms of future use and access to Bar Island.

Issues, concerns and views raised include:

*"nothing should be done to destroy the sense of discovery and adventure that one gets on arriving to the Island"*

*"unless there is an absolutely compelling case to alter things, leave the Island like it is"*

*"we don't want our relatives being dug up."*

*"some conservation must be undertaken to the church ruin and the graves should be repaired"*

*"should remain a historic site in public ownership"*

*"access needs to be improved from the water"*

*"Bar Island should remain a peaceful place and the historic elements of the Island should be preserved"*

*"visitation should not be actively encouraged"*

*"rebuild the church"*

*"raise awareness of the heritage significance"*

*"raise awareness of the value of the bush"*

*"it is a spiritual place for Aboriginal people"*

*"the Aboriginal heritage of the directional marker on the pathway and the top of the hill is significant"*

Broadly, the response at the community meeting (minutes in Appendix C) favoured protecting the Island's European historical value, and the historical and spiritual value of the Island to the local Aboriginal people. Within this context, some interest was expressed in allowing some community access, with very limited or no facilities provided. There is potential for an Aboriginal Land Claim or Native Title Claim to be made on the Island. A private individual has offered to rebuild the Church in exchange for a 21 year leasehold. The offer is of a monetary contribution of \$270,000 towards the rebuilding of the Church on the Island and to provide ongoing management input over time. Any Land Claim or Native Title Claim would only apply to the Crown land and would proceed under separate acts to the Plan of Management, and therefore does not preclude the latter, however, the proposal to rebuild the church is not consistent with conservation values and the land zoning and categorisation.

#### **4.3 STATEMENT OF SIGNIFICANCE**

Although a small and relatively remote site, Bar Island has great significance due to the natural and cultural heritage values of the Island. Bar Island has local, regional, state and even national significance through the role the Island has played in the history of human activity in the Hawkesbury.

The wild, remote, and natural character and the setting of Bar Island within the drowned river valley landscape of Berowra Creek also gives the Island high aesthetic value. This is reflected in the recognition of Berowra Creek (including Bar Island) as being of regional scenic significance in the Hawkesbury-Nepean Scenic Quality Study (Department of Urban Affairs and Planning 1996).



### Natural Significance of Bar Island

The natural significance of Bar Island is characterised by its relatively undisturbed bushland, isolated location and natural setting in the Hawkesbury River valley. Bar Island, provides a refuge for a diversity and abundance of native fauna including Brush-tail Possums, Ring-tail Possums, Long-nosed Bandicoots and a pair of Whistling Kites, which inhabit a nest on the Island. The presence of a number of different habitats on Bar Island including Eucalypt forest/woodland, small areas of Casuarina woodland, saltmarsh, mangroves and mudflat littoral habitat, allows the Island to support a greater diversity of flora and fauna. The geographical location of this remnant as an island and the absence of exotic fauna species which can adversely impact on native flora and fauna, make Bar Island valuable in terms of nature conservation and scientific research.

The flora and fauna assessment of Bar Island (Appendix B, Actinotus Environmental Consultants 2002) has identified the following natural characteristics of Bar Island as being significant:

- it exists as a natural island environment in the Hawkesbury River System with potential for scientific, educational and recreational usage.
- it provides habitat for a rare plant *Platysace clelandii* that occurs in limited distribution in the area.
- it supports Red Ash (*Alphitonia excelsa*), a plant of restricted distribution within the area, apparently used widely by Aboriginal communities in different parts of Australia for many varied purposes.
- it supports a small saltmarsh community that is considered regionally significant.
- it supports Narrabeen Slopes Forest which is considered significant within the Hornsby Local Government area.
- it provides suitable habitat and/or food trees for a number of animal species listed as threatened under the NSW *Threatened Species Act* (1995). These include the Regent Honeyeater, the Glossy Black Cockatoo, the Grey headed Flying Fox and at least three micro bats, which utilise tree-holes for roosting.
- it provides potential habitat for a rare Land Snail.
- it provides habitat for a number of migratory bird species protected by international treaties.

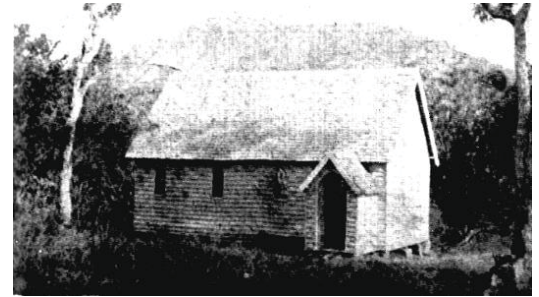


**Photo 14. Scenic value: "wild, remote and natural..."**

### Cultural Significance of Bar Island

The Cultural Heritage Assessment of Bar Island (Appendix A, Higginbotham & Associates 2002) summarises the cultural significance of Bar Island as follows:

*“St. John’s Anglican Church (Photo 15) was built on Bar Island in 1876 to serve the spiritual needs of the local community on the Lower Hawkesbury River. A part time school was transferred to the premises in 1877, became full time in 1884, but closed in April 1892, reopening for a short period in January 1901 to July 1903. The first burial in the Cemetery took place on 23 August 1879, with the majority of burials taking place before 1906, by which time the church was a ruin.*



**Photo 15. St John’s Anglican Church**

*An Aboriginal shell midden, located on the northern tip of the Island, provides evidence for occupation and use of the locality by Aboriginal groups prior to European or historical settlement. The significance of Bar Island to the Aboriginal community is evidenced by the substantial midden and stone artefacts, the burial sites of Aboriginal people in the cemetery, their historical use of and dwelling on the land, and ongoing interest in the land to the present day.*

*Thus Bar Island provides evidence of both Aboriginal and historical settlement of this locality on the Lower Hawkesbury River. It demonstrates the importance of the river as the principal means of communication for the community and provided facilities, both spiritual and educational, which were otherwise hard to find until the growth of Brooklyn in the early 19<sup>th</sup> century.*

*The cemetery provides physical and documentary evidence (inscriptions on gravestones) for the genealogy of the local community and occasionally for those who were only temporarily in the area. Bar Island is the burial place of “Granny Lewis”, (Sarah Wallace / Lewis / Ferdinand) who was of Aboriginal descent. She was also the link between many early families in the district.*

*Oral tradition also points to an association with the poet, Henry Kendall (see Photo 16). It is believed that Kendall wrote a poem for one of the children, Maud Lloyd, who is buried on the Island. This aspect of significance, if proven, would increase the significance of the Bar Island Cemetery from a local level to a state level of significance.*



**Photo 16. Henry Kendall**

*The cemetery monuments indicate a range of work by monumental masons, mostly from Sydney, the North Shore and Rookwood. Most of the headstone designs are typical of their era, in simple and restrained styles, with traditional funerary symbolism and inscriptions. One monument is a late example of a design or style known elsewhere on the Upper Hawkesbury at Windsor or in private cemeteries along the MacDonald River Valley. The dominance of white marble in the Bar Island Cemetery indicates the rapid acceptance of new fashions, which had seen marble become the predominant material used in Sydney’s cemeteries from the 1880s onwards.*

*Bar Island, together with its cemetery, have strong and close associations with other members of the local community, who have relatives buried on the Island, or who may be descendants of those buried there.*

*The social significance of the Island is also evident through its listing by the National Trust of NSW, thus indicating the recognition of its heritage significance by an independent organisation.*

*Bar Island and its cemetery (see Photo 17) have the potential to reveal important information, which is not available from other sources, or is only partly available from other sources. It provides a comparative sample of monumental masonry. While it is not suggested that excavation of the cemetery should take place, such an investigation would enable a larger number of the burials to be identified by comparison with registrations of death. It would also provide evidence of funeral customs, pathology, health of the population and other lifestyle indicators.*

*The riverine focus of the Lower Hawkesbury community, resulting in the choice of an island for a place of worship, burial and education, is extremely unusual in New South Wales. While the riverine focus of communities on the North Coast was common until the advent of rail or road transport in the late 19<sup>th</sup> or early 20<sup>th</sup> centuries, nowhere else on the New South Wales coast has this focus resulted in the choice of an island for the purposes outlined above. Unlike elsewhere, the steep terrain of the Lower Hawkesbury, downstream from Wisemans Ferry, has resulted in the necessity of choosing an island location for these purposes. A similar island site for a cemetery is also located at Port Arthur, Tasmania.*

*In most respects, Bar Island and its cemetery provide characteristics, which are representative of the locality. Two factors make the site rare at a state level of significance, namely its island location and its association with the poet, Henry Kendall, as indicated by oral tradition". (Higginbotham & Associates, 2002).*



**Photo 17. Grave of Charles F. Brown, Aged 21, 1901**

### 5.1 MANAGEMENT OBJECTIVES

Primarily, Bar Island is to be managed as a conservation reserve and historic site.

In accordance with the core objectives for management under the *Local Government Act 1993*, the principles of Crown land management under the *Crown Lands Act 1989*, and through identification of the values and issues relating to Bar Island, the following objectives for management have been established:

- To conserve the biodiversity and maintain ecosystem functions, and habitat features of the bushland on Bar Island and protect the foreshore around Bar Island and enhance all functions associated with the foreshores role as a transition area between the terrestrial and aquatic environment.
- To enhance the natural values of Bar Island through the restoration and regeneration of degraded bushland and foreshore areas.
- To protect the scenic quality, natural landscape character and aesthetic value of Bar Island.
- To protect and enhance the Aboriginal and European heritage of Bar Island through proper conservation management and restoration of the existing historical and archaeological relics on the Island.
- To enhance the community understanding of the natural and cultural values of Bar Island and its importance in the history of the Hawkesbury River region through interpretation.
- To provide for community use and access to Bar Island at an appropriate level and in such a way as will minimise and mitigate any disturbance caused by human intrusion.
- To involve the community in the conservation and management of Bar Island including Aboriginal groups, local residents and other interest groups.

### 5.2 FUTURE USE AND DEVELOPMENT OF THE LAND

As Bar Island contains Crown land and community land the use is controlled by the *Local Government Act 1993* and *Crown Lands Act 1989* (refer to sections 3.1 & 3.2 of this plan). The zoning of the land under the Hornsby LEP further defines permissible use (refer to section 3.3 of this plan).

If there is any further development of the community land other than that which is authorised by this Plan of Management, or a change in the categorisation of Bar Island is proposed, amendment and re-exhibition of the Plan of Management would be required.

**Approved Uses**

The following uses and activities are appropriate for Bar Island in accordance with the provisions of this Plan:

- Interpretation
- Education
- Research
- Passive recreation
- Routine maintenance activities
- Rubbish removal
- Bush regeneration / weeding
- Heritage conservation works
- Memorial or wedding services, with a permit for groups over 10 people
- Aboriginal ceremonies

Use of Bar Island is to be limited to daylight hours.

**Prohibited Activities**

The following uses and activities are prohibited on Bar Island:

- No overnight stays on the Island or camping are allowed
- No lighting of fires
- No domestic animals including cats and dogs are allowed
- No activities that result in disturbance or removal of native vegetation
- No activities that result in disturbance of cultural relics
- No items of historical significance are to be removed from the Island
- No consumption of alcohol
- No visitation by groups over 40 people at one time

**Burials on the Island**

The resumption of burials on the Island has been raised, as has the idea that an area could be set aside for memorial plaques, with burials or cremations being located in another cemetery.

Bar Island is no longer dedicated as a cemetery or church, but as public open space land of cultural heritage significance. The Plan of Management does not allow further burials or any kind of funerary function for Bar Island since the former would detract from the heritage character of the existing structures and potentially create public health issues, and the latter could attract inappropriately large crowds onto the island. However, if desired by individuals, the scattering of ashes would not be out of keeping with the status and significance of the Island.

**Buildings and Structures**

As the management of Bar Island will be primarily for the conservation of the Island's cultural and natural heritage values the introduction of new structures or buildings on any part of the Island is prohibited under the existing zoning and this Plan of Management. The erection of new structures or rebuilding of former structures would be likely to compromise several of the significant attributes identified for Bar Island, and negate several of the general objectives and principles for community and Crown land management and specific objectives of this plan. Additionally, this would not conform with best practice heritage conservation principles outlined in documents such as the ICOMOS Burra Charter (refer Appendix A), which recommends that all work to heritage items should involve the least possible intervention in the existing fabric and that new work should not constitute the majority of fabric in a restored monument or other structure (Jean & Lavelle 1996).

The construction of any new buildings and structures is not authorised under this Plan of Management, with some exceptions as described below.

The Plan approves the following types of structures as being generally appropriate for Bar Island, which are primarily to facilitate access, management, and protection of heritage elements. This authorisation is subject to any statutory development consent requirements, heritage requirements and an assessment that the type of structure, the location, style, size, materials, and scale are consistent with the relevant objectives and desired outcomes of this Plan.

- a jetty structure
- signage (for interpretive and compliance purposes)
- other low key interpretive works
- heritage restoration works as proposed in this Plan
- protective fences
- reconstruction or remediation of existing pathway

**5.3 LEASES, LICENCES AND OTHER ESTATES****Community Land**

Leases and licences formalise the use of community land by groups and individuals for both community and short-term private use. To comply with the Local Government Act, this Plan of Management must clearly specify what leases and licences are authorised on Bar Island.



The *Local Government Act 1993* (section 46) states that a lease, licence or other estate may be granted for the provision of public utilities and works associated with or ancillary to public utilities, or may be granted, in accordance with an express authorisation in a Plan of Management. Council may only grant a lease, licence or other estate for a period of less than 21 years for purposes consistent with the categorisation and core objectives of the particular area of community land.

No leases or licences currently affect the community land on Bar Island. Given the nature of the reserve, the Plan of Management does not permit any specific leases or licences over the land.

This plan of management does allow the granting of permits for intermittent or short-term use of the community land (on a daily, weekly, seasonal or yearly basis) on Bar Island for activities that fall within the following categories:

- delivering an outdoor public address
- outdoor memorial or wedding services
- outdoor Aboriginal ceremonies
- other minor uses

In relation to such licences, Council must take into consideration that the use complies with s. 24 of the Regulations and the following matters in deciding to grant such a licence:

- whether the use/activity is in the public interest;
- whether the use/activity would cause any significant detrimental impact to the park or local community, and
- what the appropriate limit on maximum numbers in attendance is to be.

#### **Crown Reserve**

All tenures over part or whole of a Crown reserve are made between the reserve trust and lessee / licensee, and are subject to the provisions of the *Crown Lands Act 1989*.

Under any lease the construction of facilities will be permitted provided:

- a) The facilities which are proposed are in accordance with a Plan of Management adopted for the reserve under the Crown Lands Act 1989, and
- b) The Minister and the Trust (Hornsby Shire Council in the case of Bar Island) must give approval to all leases and licences greater than 12 months and up to 20 years, according to Crown land policy (up to 99 years by law).

**Further Considerations**

Issues to be considered when entering into new lease or licence agreements include:

- a) Ensuring all licences are based on a sound asset management basis with rents and charges reflecting true land values;
- b) Ensuring all licences meet the requirements of relevant State and Local Government Acts and Council town planning controls;
- c) Ensuring proposed activities are compatible with the core objectives established in the *Local Government Act 1993*, and
- d) Negotiating greater financial returns, which will contribute to management and maintenance of community land.

All future lease / licence arrangements entered into shall be in accordance with Council's Policy 'Lease/Licence of Council Land' -CSISAS 14 and in accordance with requirements of the *Local Government Act 1993* and the *Crown Lands Act 1989*. Council's policy provides that the maximum length of lease/licence of Council land will generally be five (5) years. Council may give consideration to granting an additional period of tenure where special circumstances warrant this occurring. All funds managed by the Trust must be separated from funds managed by another legal entity.

The management framework addresses four major values for Bar Island, being:

- Natural Heritage;
- Cultural Heritage;
- Landscape Character, and
- Use of the Land.

Each of the management issues identified is discussed in this section. Desired outcomes with regard to each issue are identified along with actions to achieve these, and performance measures to determine overall success.

## 6.1 NATURAL HERITAGE

### 6.1.1 Vegetation Management, Bushland Regeneration and Weed Control Discussion

As Bar Island is isolated from other areas of land, the native vegetation on-site is not impacted on by surrounding land uses. The weeds present are generally in disturbed areas around the foreshore landing, the Aboriginal midden site, along the track, and around the church ruins and cemetery. Any ongoing weed impacts would be minimal but would mostly be through introduction of seed by birds and people inadvertently bringing weed seeds onto the Island (e.g. caught in shoes).

Levels of weed invasion and bushland degradation are relatively low on Bar Island. However there are currently signs of significant weed incursion. The most significant weed management issue is the scattered but frequent occurrence of *Lantana camara* (Lantana). Other noxious weed species that occur on the Island are *Protasparagus aethiopicus* (Asparagus Fern) and *Ochna serrulata* (Mickey Mouse Plant). A full list of weeds species occurring on Bar Island can be found in the Flora and Fauna Assessment (Appendix B, Actinotus Environmental Consultants 2002).

Exotic species such as Periwinkle (*Vinca major*) are good indicators of historical occupation and the removal would therefore be detrimental to the significance of the island (Higginbotham & Associates 2002). Periwinkle should be monitored and restricted to the site of the hut.

#### Vegetation management in the midden area

The following strategy has been recommended in the Flora and Fauna Assessment (Appendix B, Actinotus Environmental Consultants 2002) and is to be undertaken as part of this Plan of Management.

The Aboriginal kitchen midden site at the far northern section of the Island is to some extent stabilised by the soil-binding grass *Stenotaphrum secundatum* (Buffalo Grass).

It is recommended to initially remove all other weed species, such as *Verbena bonariensis* (Appendix B), from the midden site but to maintain the cover of Buffalo Grass to stabilise the structure of the midden. Stocks of locally occurring indigenous tussock grass species such as *Themeda australis* (Kangaroo Grass), *Microlaena stipoides* (Weeping Grass), *Austrodanthonia linkii* var *fulva* (Wallaby Grass) and even *Cynodon dactylon* (Couch), grown from seed or from rootstock taken from populations occurring at Bar Island, should progressively be introduced into the midden soil. These indigenous grasses will most likely eventually outcompete the Buffalo Grass and maintain the stability of the culturally significant midden site. *Sporobolus virginicus* is a salt tolerant grass and the genetic race growing behind mangroves on the northern tip of the Island is one which efficiently binds sand and helps prevent beach erosion (Smith-White 1988). This grass could be utilised on the seaward side of the midden at the high water level as part of the rehabilitation process.

#### **Vegetation management in the cemetery area**

The following strategy has been recommended in the Cultural Heritage Assessment (Appendix A, Higginbotham & Associates 2002) and is to be undertaken as part of this plan of management.

Within the cemetery area, there is a risk that periodic removal or slashing of vegetation may disturb the simple stone surrounds of several of the graves. This could also easily result from pedestrian traffic over grave sites. It is important that this disturbance should be minimised by cutting native grasses short enough to clearly reveal the position of graves, but also by clearly defining the pathway through the cemetery to avoid stone grave surrounds. This pathway may best be defined by shorter trimming of grass and other vegetation (Higginbotham & Associates 2002).

Vegetation within the cemetery area should be managed to retain the native canopy tree species, grasses, groundlayer plants and climbers. Within the cemetery area, mid storey vegetation or shrub species, which will damage monuments or graves should be removed by trimming to the ground and the application of poison. Power trimmers should not be used in the cemetery area as they cause indiscriminate damage to plant material and to the edges of masonry monuments. Periodic hand trimming is appropriate.

The exotic bulbs (Freesias, Autumn Crocus, Gladioli) and Hardenbergia species within the cemetery should be retained. They are unlikely to invade rapidly into the bushland areas. However, populations of these bulbs and other species should be monitored and if invasion of healthy bushland is occurring, control of the spread of these plant species should be undertaken. Planting of appropriate species may be undertaken to prevent erosion or to reinstate previously recorded species in the cemetery.



**Photo 18. Native grass growing in a rock crevice**

The following recommendations from the Flora and Fauna Assessment (Appendix B, Section 38.1) will also be followed:

All weeds in the vicinity of the monument, church and grave site ruins (Appendix 2) should eventually be removed by hand weeding. Indigenous grasses such as *Themeda australis*, *Aristida vagans*, *Imperata cylindrica* and *Microlaena stipoides* should be encouraged and could be introduced from plantings taken from local seed-stock.

Once weeds, including exotic grasses, have been removed from culturally significant sites and other areas such as along the sides of tracks, it is essential to implement a periodic monitoring program to assess and remove any future incursions. Monitoring and prompt removal will be more practicable after the initial suite of weeds has been removed.



**Photo 19. Vegetation among the graves**

**On Bar Island,** native vegetation needs to be managed and conserved, and any weed incursions need to be removed, whilst ensuring these activities do not have an adverse impact on items of cultural significance on the Island.

#### **Desired outcome**

- All weed species, particularly noxious species, are removed from Bar Island, to allow natural regeneration of endemic species.
- On-going bush regeneration is to be undertaken on the freehold and Crown land areas of Bar Island.
- All weeds are to be eventually removed from the midden site and the midden stabilised and covered by native grass species.

#### **Actions**

- Implement a persistent, continuous eradication program to remove Lantana and other weeds from the Island using best practice bush regeneration techniques.
- Undertake specific weed management and stabilisation works within the midden area – initially remove all weed species except for buffalo grass, which is to be maintained to stabilise the midden structure.
- Undertake specific weed management works within the cemetery.
- Implement a periodic monitoring program to assess and remove any future weed incursions, once the initial suite of weeds has been removed. The monitoring program

should include the freehold and Crown land areas to ensure that bushland in good condition is maintained.

- Vegetation maintenance and weed removal is to follow the recommendations of both the Flora and Fauna Assessment and Cultural Heritage Assessment.

#### Performance measures

- The midden area is stabilised with a cover of native grasses, within 2 years.
- All major weed incursions have been removed from the Island, within 2 years.
- No noxious weed species are present on the Island, after 2 years.
- Native grasses have replaced weed grass cover around the grave sites, within 2 years.
- Bushland in freehold and Crown land areas is maintained in a good condition.

### 6.1.2 Foreshore Erosion

#### Discussion

The rock formations and large boulder masses extending to the low water line for most of the perimeter of the Island, and the fringing mangroves have limited the potential for wave action erosion of the Island (Actinotus Environmental Consultants 2002). However, in the north-east point of the Island there is evidence of high energy wave erosion resulting in undercutting of the shoreline and removal of beach sand (see Photo 20). The root systems of *Casuarina glauca* present along this area of the foreshore appear to be quite important to the bank stability. Undercutting can be reduced by further development of the root system. *Casuarina glauca* is good at spreading by suckering from existing plants and growth of *Casuarina* in this area should be encouraged as the roots of a number of plants intertwined will significantly increase the strength of the bank. Some *Casuarina* could also be planted from tubestock (P. Bennett, *pers. comm.* 26.08.2002). Additionally, dense planting of species indigenous to the Island with good soil binding root systems at the top of the tidal range will absorb wave action and thus protect the bank. Additional protection of the undercut bank may be required and could be achieved by placing locally obtained foreshore rocks in front of the bank to dissipate high energy wave action.

The Riverbank Management Program, Department of Land and Water Conservation can be contacted for further advice or information regarding restoration works.



**Photo 20. Foreshore erosion in the north-east corner of Bar Island - undercutting of the bank caused by wave action; the *Casuarina glauca* is important in strengthening the soil integrity**



**Desired outcome**

- The foreshore bank and midden are protected from further erosion.
- Impacts causing erosion are mitigated or minimised.
- *Casuarina glauca*, native plantings and rocks protect and strengthen the bank from erosion caused by wave action and strong tidal action.

**Actions**

- Undertake bank restoration works through revegetation – planting *Casuarina glauca* tubestock at the top of the bank and planting on the bank at the top of the tidal range.
- Encourage *Casuarina glauca* seedlings to regenerate from existing plants in the foreshore area, by suckering (this is already occurring a little higher up the bank).
- Place locally obtained foreshore rocks in front of the bank to dissipate high energy wave action

**Performance measures**

- No further undercutting of the bank and midden has occurred.
- Native vegetation has successfully established.

**6.1.3 Habitat Conservation****Discussion**

The Island does not contain a high diversity of fauna, possibly reflecting the isolation from mainland habitats, limited space, food and water availability and also perhaps the season the survey was conducted (Actinotus Environmental Consultants 2002). The number of bird species and activity of microchiropteran bats is expected to be significantly higher in summer (ibid.). Bar Island provides ideal habitat and a relatively undisturbed refuge for native fauna. Human visitation is low at present and feral mammal fauna that can adversely impact on native species (such as cats, foxes, rabbits or dogs) are absent from the Island.

**Desired outcome**

- Habitat for native fauna is conserved and enhanced.
- Native habitat is not adversely impacted by visitation to the Island.

**Actions**

- Domestic dogs and cats are to be prohibited from the Island.
- Undertake an additional baseline fauna survey in summer (November to March) to identify fauna species that visit the Island seasonally, or that may be in hibernation during winter.
- Integrate Bar Island into existing Council fauna conservation programs
- Install signage to keep people out of the littoral mangrove habitats, by informing the community of damage that can be caused by walking in mangrove areas.

**Performance measures**

- Faunal species diversity and abundance is maintained or increased.
- There is no evidence of exotic mammal species on the Island.

**6.1.4 Fire Management****Discussion**

All natural species of plant on Bar Island are adapted in specific ways to the presence of fire, particularly fire regimes that include a periodicity of fires of at least 5 years or greater. A periodicity of fire, particularly high intensity fires, of 5 years or less may disadvantage some obligate seeding species. A periodicity from between 50-100 years, however may disadvantage relatively short-lived species, regardless of whether they be obligate seeders with a limited soil-stored seedbank, or small life-form vegetative resprouters that may not be sufficiently adapted to low light intensities. A periodicity of fire between 5 and 50 years is likely to have been associated with the evolution of much of the sclerophyllous flora of Australia. This periodicity of fire is likely to continue either through natural ignition events, or by human negligence or interference, regardless of theoretically emplaced or formulated fire management strategies (Appendix B, Actinotus Environmental Consultants 2002). Therefore, fire periodicity of 10 to 50 years should be adopted for Bar Island as it will probably not disadvantage the life history, viability or persistent establishment of any of the currently occurring indigenous plant species of Bar Island.

Wild fires in the past have thought to caused considerable damage and destabilising of some of the culturally significant remains on Bar Island such as the church ruins and cemetery (Campbell, *pers. comm.* 2002). Effective fire protection buffer zones around the items of cultural significance on the Island would need to be around 30m in width. Complete clearing of this extent of bushland would be impracticable for all areas of cultural significance.

An area within 30m of a perimeter around the culturally significant sites such as the church ruins, site of the cottage and cemetery should be managed as an asset protection zone, implemented preferably by underscrubbing. This would minimise the effects of a low or moderate burn on these areas as a fire of low to moderate intensity would more likely burn out where there is very little underscrub to maintain a hot fire front. An intense wildfire however, would most likely burn through the vegetation regardless of underscrubbing. (Actinotus Environmental Consultants 2002).

**Desired outcome**

- Culturally significant relics on Bar Island are given an appropriate level of protection to minimise potential adverse affects of bushfires.
- Ensure biodiversity conservation.

**Actions**

- Selectively remove vegetation from the mid-stratum and understorey, within a 30m radius of the church ruins, and cemetery.
- Monitor fire regime to ensure appropriate periodicity and intensity of fire to ensure biodiversity conservation.
- Integrate fire management with bush regeneration program for Bar Island.

**Performance measures**

- Bushfire protection measures are implemented and maintained.
- Natural or semi-natural fire periodicity is maintained.

**6.2 CULTURAL HERITAGE****6.2.1 Aboriginal Heritage****Discussion**

To date no archaeological assessment of Bar Island has been undertaken. In order to better understand the Aboriginal importance of Bar Island and to ensure that conservation and management policies are appropriate for the Island, this should be completed at the earliest opportunity.

The construction of a pathway across the midden will require liaison with NPWS and LALC and other groups.

As well as having important archaeological value in a physical sense Bar Island is also important in a spiritual sense to descendants of the original people of the area. It is important that Aboriginal groups are continually involved and consulted where appropriate in the decision making process for Bar Island.

**Desired outcome**

- The past present and future Aboriginal cultural significance of Bar Island is conserved and enhanced.

**Actions**

- Prior to disturbance or change of use, undertake an Aboriginal archaeological assessment, including a site survey to accurately locate relics.
- Update NPWS Aboriginal Sites Register of NSW with further information that has been or is in the future uncovered about the Aboriginal significance of Bar Island.
- Undertake liaison with NPWS and local Aboriginal groups prior to the pathway construction over the midden

### Performance measures

- Aboriginal values of the site are taken into consideration with all important management decisions that are made.
- Further understanding of the Aboriginal archaeological significance of Bar Island is obtained.

### 6.2.2 European Heritage

The surviving condition of the Bar Island Cemetery and associated remains requires the completion of repair and maintenance work (Higginbotham & Associates 2002).

The 1996 Conservation Plan (Jean & Lavelle) made detailed recommendations for the repair and conservation of the cemetery, church remains and memorial. However, none of these conservation works were subsequently undertaken. Assessment of the condition of the cemetery monuments, the memorial and the chimney has been updated, together with a program for repair works (Bickersteth 2002, see Appendix A).



**Photo 21. In praise of Rev. H.H. Britten, first Anglican minister of the Island's church**

The statement of cultural significance for Bar Island has indicated two aspects of significance at a State level, namely the rarity of an island location for the cemetery and also the association with the poet, Henry Kendall. The state level of significance indicates that the site should be placed on the State Heritage Register and also the Register of the National Estate. The significance of the heritage item also makes it necessary to conserve and manage the site in an appropriate manner and in accordance with standard heritage guidelines, practice and legislation (Higginbotham & Associates 2002).

### Desired outcome

- The European cultural heritage value of Bar Island is conserved and enhanced.
- The heritage significance of Bar Island is recognised at a state and even national level.

### Actions

- Prior to disturbance or change of use, detailed recording of the site should be undertaken to archival standard, in accordance with NSW Heritage Office (1998) Heritage Information Series: How to prepare archival records of heritage items.
- Council to investigate potential funding sources to undertake conservation and management works, and maintenance of the graves.
- To conserve the "HE BRITTEN" inscription on the sandstone rock on the pathway, divert the pathway around the rock, so that it is no longer used as a stepping stone.

- The repair of the cemetery, memorial and chimney should be undertaken in accordance with:
  - the policies of the 1996 Conservation Plan, namely Sections 8.3.1, 8.3.2, 9.5.4, 9.5.5. Detailed guidelines are given in Section 10 of the 1996 Conservation Plan.
  - the updated guidelines from the condition assessment undertaken by International Conservation Services (Bickersteth 2002)(see Appendix A).
- It is important that the relatives and descendants and local community be notified and asked for their response to the conservation works for individual graves. They may wish to be more closely involved in the process. The notification of the community should be part of the interpretation, display and education role of the site.
- Submissions to the NSW Heritage Office and Australian Heritage Commission for Bar Island to be placed on the State Heritage Register and also the Register of the National Estate.
- Amend Schedule D of the Hornsby LEP for the listing of the cemetery and church as items of State significance.

**Performance measures**

- All restoration works have been completed within 5 years of adoption of the Plan.
- Statutory heritage significance of Bar Island is raised to at least state significance.

**6.3 LANDSCAPE CHARACTER****Discussion**

The wild, remote, and natural setting of Bar Island has been identified as an important and valuable element of the Island that should be retained in its management, restoration and maintenance. Aspects of Bar Island that contribute to this character include natural vegetation covering the Island, the restricted access created by its geographical location and that no built structures are visible from the river or Island foreshore. The presence of historical relics within the largely natural setting adds extra layers of meaning to the landscape, and it is as a collective entity that the Island is most significant (Jean & Lavelle 1996).

**Desired outcome**

- Retention of the existing landscape character.
- Restoration of cultural and natural elements to conserve these important elements that contribute to the value of the Bar Island landscape.

**Actions**

- Carry out heritage conservation works, bush regeneration, and erosion control works.
- Assess any works such as construction of a jetty, signs, fences, path construction for the impact on the view from the surrounding waters.

**Performance measures**

- Heritage conservation and restoration measures carried out in accordance with the provisions of this Plan.
- Any works visible from the surrounding water are appropriate to the desired character for the Island.



## **6.4 USE OF THE LAND**

### **6.4.1 Access and Visitation**

#### **Discussion**

##### **Use of the Island**

In the recent past, use of the Island appears to have been quite high and has resulted in several problems including erosion of the midden; sporadic vandalism of headstones; damage to the chimney through removal of stones to form fireplaces and lighting of fires in the chimney structure; weed invasion of the jetty area and midden; the cutting of trees on the Island for firewood, and littering (Jean & Lavelle 1996).

At present, largely due to the removal of the jetty, access and visitation is generally at a lower level. However, inappropriate use of the Island such as camping and the lighting of fires is still occurring.

The Bar Island Conservation Management Plan (Jean & Lavelle 1996) recommended that access to the Island be restricted and controlled, perhaps through a permit system. Currently it is felt that this would be hard to put into practice and police because of the remote location of the Island and the nature of use.

Visitation by the community is clearly expected and should be facilitated, especially by people with a prior connection to the Island or who have relatives buried in the cemetery. Therefore provisions for access and visitation will be provided for the community, however visitation will not be actively promoted by Hornsby Shire Council.

As Bar Island is an important natural and cultural heritage area, access and visitation to the Island is to be managed so as not to adversely impact on these values and community use is to be limited to that which is appropriate to the inherent values of the Island as outlined in this Plan (see section 5.2).

Acceptable uses of Bar Island (as outlined in section 5.2) include education, research and interpretation of natural and historic elements of the Island, with visitation limited to daylight hours by small groups.

Unacceptable and inappropriate uses include overnight stays and camping on the Island, the lighting of fires, activities that involve the removal or disturbance of any native vegetation, consumption of alcohol, and visitation by groups of over 40 people at any one time.

##### **Access Pathway**

The current access route into the Island from the foreshore landing area, via an unformed track leading south-west, crosses over the Aboriginal midden and leads up to the former church site and cemetery. Although the introduction of new elements and structures to the Island is not recommended, the introduction of a walkway above the midden to prevent

increased erosion is an exception to this as an essential protection measure, deemed necessary by this study and previous studies (Jean & Lavelle 1996). The precise location and design will require careful consideration in order that this does not diminish the cultural significance of the item.

While the 1996 Conservation Plan proposed two options for resolving the issue of erosion caused by the pathway across the shell midden, the less intrusive option is favoured by this report.

Possible method of construction include a raised timber boardwalk or the use of decomposed granite or crushed sandstone /gravel on a geotextile base. The second of these methods seems to be a preferred option, being less intrusive and following a minimal preservation policy, to undertake only the necessary works to ensure the conservation of significant features of Bar Island. Additionally, the construction of raised timber structure over the midden would require footings to be set in the midden, which may have an adverse impact on the midden.

The pathway construction would involve the laying of geotextile on the ground surface and the application of a layer of crushed sandstone to form a pathway surface that blends well with the surrounds. The use of rough sandstone blocks as steps and to divert stormwater on steeper eroded sections of the pathway is appropriate. The pathway should be diverted around the "HE BRITTEN" inscription. The construction of this pathway should only be carried out after consultation with the NPWS, the LALC and other Aboriginal groups.<sup>3</sup> (Appendix A, Higginbotham & Associates 2002).

The plan does not allow any other pathway construction on the Island to be undertaken aside from that described above.

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<sup>3</sup> This method of pathway construction was recommended by Brad Welsh, NPWS, Bobbin Head.

### Visitor Facilities

At present there are few facilities for recreational users of the Island e.g. no rubbish bins or toilet facilities are currently available. In keeping with the approach to the scale and intensity of visitation described in this Plan, these facilities will not be installed on the Island, as this would detract from the wild natural setting and heritage values of the Island, may cause a number of environmental problems, and would increase Council's maintenance requirements. Signage installed should include a request for visitors to please take their rubbish with them.

### Access to the Island / Jetty

As access to the Island is essential to allow public visitation and for maintenance and management purposes, the issue of the level and type of access needs to be addressed. Prior to Council taking ownership of the land, there was a long jetty at the north-east point. Due to safety reasons with the jetty, Council have removed this and only the jetty footings remain (see Photo 22), with current access from the beach area.



**Photo 22. The jetty footings at the access point in the north-east of Bar Island**

In keeping with the principle that access should be allowed, provision should be made for some form of low key landing and mooring structure. Options include either the replacement of the deck of the existing jetty or the construction of a new jetty.

The jetty should meet with safety standards, and receive appropriate approval following a favourable environmental review from the Dept. of Land and Water Conservation. It is the site of the jetty, not the jetty itself that is significant, although any new structure should fit in with the historical setting (Appendix A, Higginbotham & Associates 2002).

This plan recommends the replacement of decking on the existing jetty as a less obtrusive option, rather than the building of new structures.

Access to Bar Island should be monitored to assess the level of use and any consequent impacts.

### Desired outcome

- Access and visitation to Bar Island will remain at the present low key status, and will not be actively promoted by Hornsby Shire Council.
- A small jetty has been reinstated to facilitate access to the Island.
- Visitation to the Island occurs only during daylight hours.
- Activities and human use on the Island does not lead to further degradation of the natural and cultural heritage features of the Island.

**Actions**

- Reinststate the jetty, only to the extent required for the landing of small boats. However, no further reinstatement of the jetty is recommended. (in order to limit the size of groups of visitors to Bar Island)
- Council is to investigate potential Waterways or other funding for rebuilding the jetty.
- Install durable signage to indicate permissible and appropriate uses for the Island, which will include that overnight stays and camping is prohibited, no cats or dogs are allowed, people should take all their rubbish with them (see Section 6.4.3).
- Monitor visitor levels and movement trends on Bar Island.
- Monitor visitor impacts on built and natural elements on Bar Island.

**Performance measures**

- A new jetty landing is in place.
- Signage has been installed.
- Human use of the Island does not lead to degradation of the natural and cultural heritage items on the Island.
- Visitor levels do not significantly increase as a result of changes made as outlined in the Plan.
- Management decisions are informed by a better understanding of visitor usage patterns.

**6.4.2 Interpretation****Discussion**

Past and present use of the Island has had some detrimental effects on the natural environment and heritage items on Bar Island. Although some of this is due to sporadic vandalism, much may have been done unintentionally due to an unawareness of the importance and significance of these items. Local people and recreational users of the Hawkesbury River generally value the natural beauty and historical fabric of the region, the values that attract people to the area in the first place.

Recently a small protective fence and interpretive sign have been erected around the chimney site. Even this very simple level of interpretation has immediately communicated to the community and visitors to the Island that there are important heritage relics on the Island that need to be protected and conserved. In general people value what they know, so if people visiting Bar Island are made aware of its natural and cultural heritage significance then they will value and respect this.



**Photo 23. Current interpretive signage**

Therefore it is recommended that the natural and historical values of Bar Island are interpreted and communicated to the local and broader community. One component would be the installation of interpretive signage, following these general guidelines:

- Informative and sympathetically designed signs or other markers;
- Media used should be durable and vandal resistant;
- Form is to be low key;
- Restricted to around the church, former cottage and graveyard sites (but not within the cemetery), and
- Generally not visible from the surrounding waters.



**Photo 24. St John's Church, Bar Island**

### Communication Strategy

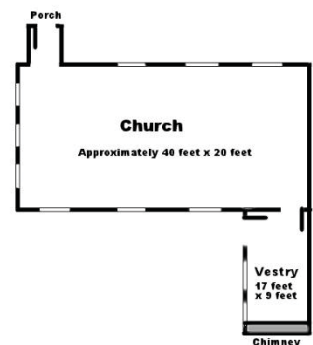
Measures for interpretation include the following:

- Encourage continuing research and publication of Aboriginal and European heritage significance
- Preparation of a brochure / leaflet or educational resource kit for local community groups, historical societies, schools.
- On-site interpretive material
- Re-instatement of plaques that have been removed from the site
- Commemorative plaque

### On-site Interpretive Material

In keeping with the above general guidelines an option for the interpretation of the cultural heritage elements is proposed as follows. The idea aims to get away from the traditional approach to install panels and signs and aims to provide interpretive information on the Island whilst being sympathetic to and not compromising the natural and cultural heritage value of the Island. The design encompasses outlining the original footings of the former church building (see Figure 5). This would incorporate using stone markers at the corners joined by a metal strip edge set into the ground and visible at the ground level flush with the surface. This metal edge would be inscribed with information and historic memoirs to communicate the historic significance of the site. Additionally, interpretive signage could be incorporated into this design including the following information:

- Plan of the island showing the location of major elements.
- Brief outline of the history of the island focussing of the elements that relate to its significance i.e. the significance of various people buried in the cemetery such as Sarah Ferdinand / "Granny" Lewis, members of early pioneering families, and Maude Lloyd whose death inspired a poem to be written by Henry Kendall.
- Photographs and illustrations of the island in the past.



**Figure 5. Plan of St John's Anglican Church, Bar Island**

**Commemorative Plaque**

Consideration should also be given to the future installation of a memorial plaque which documents all the individuals buried on the Island, many of whom have no extant grave, marker or headstone survives.

**Interpretive Study**

It is however, recommended that an interpretive study be undertaken to further develop these concepts and designs, and then implement the findings.

**Desired outcome**

- The heritage value of the Island and the history of components is interpreted on-site in an appropriate and sympathetic manner in accordance with the objectives of the Plan.

**Actions**

- Install interpretive elements on-site.
- Prepare interpretive material about Bar Island to be available to the local and broader community and distribute to interested community groups.
- Re-install plaques that have been removed from the site in their original position, where possible.

**Performance measures**

- Interpretive elements are installed.

**6.4.3 Compliance Issues****Discussion****Management, monitoring and surveillance**

Access and use of Bar Island is to be in accordance with this Plan of Management. Hence, measure need to be taken to reverse past negligence and address the problems of vandalism and inappropriate use.

Part of this problem is that for many years now there has been no active management presence at Bar Island. Carrying out of recommended actions in this plan for conservation, restoration, and interpretive works will in turn promote a custodial awareness of the site which will help to keep vandalism and inappropriate use to a minimum.



However, monitoring and surveillance of the site is also an important part of promoting a custodial awareness over the site that will help to deter vandalism and inappropriate use.

Measures for surveillance and protection of Bar Island include:

- Maintenance and monitoring checks by Council staff. Frequency of visits should change seasonally, with higher frequencies in the warmer months of higher waterway usage. Additionally this should be determined through an adaptive management approach to determine the most effective program of monitoring.
- Setting up an honorary ranger system whereby people such as local community members, Waterways officers or rural fire brigade services, who regularly pass within the vicinity of the Island, conduct regular inspections to check on the condition of the Island and report any problems to Council.
- Establishing a community working group such as a “Friends of Bar Island” group which can be involved with activities such as monitoring the site, maintenance, helping with bush regeneration works etc.

#### **Community involvement in management**

As Bar Island is under the care, control and management of Hornsby Council, it is important that management decisions are made at this level, by Council. However, Bar Island is community land and future use and management is to reflect community values and is to benefit the whole of the community. Therefore, it is important that the community is involved at an appropriate level in the management of Bar Island.

The establishment of a community management group or “Friends of Bar Island” Group comprising existing interest groups (local community, Hornsby Shire Council, relevant State government agencies and Aboriginal groups) is recommended. This will allow the community to be involved in the care of Bar Island and to work with Council to present views and issues so that informed management decisions can be made.

#### **Compliance Signage**

It is important that at the access point to Bar Island, that compliance signage be installed including the following information:

- Prohibited activities.
- That Hornsby Shire Council manages the Island.
- That the Island and surrounding waters are regularly patrolled.
- That fines will apply for inappropriate use.
- That the site is a culturally (both Aboriginal and European) significant site and that this should be respected.
- That the natural values of the Island (bushland and estuarine ecology) are unique, fragile and protected, and that this should be respected with appropriate behaviour.

### **Desired outcome**

- A custodial presence is established over Bar Island to protect the significant cultural and natural attributes of the Island.

### **Actions**

- Hornsby Shire Council is to undertake inspections of Bar Island, and further investigate the feasibility of setting up an honorary ranger system.
- If community interest desires, establish a Friends of Bar Island Group to allow all of the community to be involved with the management of Bar Island.

### **Performance measures**

- Monitoring of Bar Island is undertaken on a regular basis, dependent on season and adaptive management response.
- Incidence of vandalism and inappropriate use are reduced to a minimum.

The Action Plan is the working component of the Plan of Management. The Action Plan outlines the means of achieving the objectives and how performance in their achievement is to be measured.

The basis of performance monitoring is the extent to which actions are implemented and whether they are undertaken according to the priority of the plan.

Performance of the Plan in relation to Bar Island will be based on the extent to which the implementation of the actions actually achieve the desired outcomes and meet the objectives and performance measures identified in the plan.

The priority ratings in the Action Plan are subject to the availability of necessary resources (Council staff, funding from various sources or volunteer hours) and will be subject to constant review during the period of efficacy of the Plan of Management.

Status and priority ratings in the Action Plan are defined as follows:

Immediate (I)	Action completed within 1 year
High (H)	Action completed within 2 years
Medium (M)	Action completed within 2-5 years
Long term (L)	Action commenced after 5 years
Ongoing (O)	Action carried out on a regular basis during the period of efficacy of the Plan of Management.

The Plan of Management is intended to have a period of efficacy of five years with ongoing review to ensure actions and priorities are achievable and the capital and recurrent costs remain relevant.

Overall responsibility for the implementation of the Plan rests with Hornsby Shire Council.

Responsible officers within Council include:

MBB	Manager Bushland and Biodiversity
MPL	Manager Parks and Landscapes
MTPS	Manager Town Planning Services
MDC	Manager Design & Construction
MWC	Manager Water Catchments

**Vegetation Management, Bushland Regeneration and Weed Control**

<b>Key Strategies and/or Actions</b>	<b>Desired Outcome</b>	<b>Responsibility</b>	<b>Priority</b>	<b>Performance Measure</b>
Implement the recommendations of the flora and fauna assessment, as follows:				
Implement a persistent, continuous eradication program to remove Lantana and other weeds from the island using best practice bush regeneration techniques.	All weed species, particularly noxious species, are removed to allow natural regeneration of native species	MBB	H/M	No noxious weed species present within 2 years of adoption of the plan
Undertake specific weed management and stabilisation works within the midden area	All weeds are eventually removed from the midden and the midden stabilised with a cover of native grasses	MBB	H/M	Midden stabilised with a cover of native grasses within 2 years of adoption of the plan
Implement a periodic monitoring program to assess and remove any future weed incursions, once the initial suite of weeds has been removed. Maintain bushland that is currently in good condition.	On-going bush regeneration is to be undertaken on the freehold and Crown land areas of Bar Island	MBB	O	Regular monitoring and maintenance inspections.
Implement the recommendations of the cultural heritage assessment, as follows:				
Undertake specific vegetation management works within the cemetery area.	Native vegetation is managed and conserved whilst ensuring that cultural heritage items are protected	MBB	H/M	Native grasses have replaced weed grass cover around the gravesites within 2 years of adoption of the plan. Any native vegetation threatening grave stability is removed within 1 year of adoption of the plan.

Retain and monitor cultural plantings within areas of cultural significance	Exotic bulb species are retained in the cemetery area. Periwinkle is retained within the area of the former cottage.	MBB MPL	O	These species are inspected as part of regular site monitoring.
Retain all major trees and inspect periodically for health and stability. Dead or dying branches in danger of falling on historical monuments are to be removed.	Historical monuments are protected from damage from falling trees and limbs	MPL	O	Annual inspections of major trees

**Foreshore Erosion**

Key Strategies and/or Actions	Desired Outcome	Responsibility	Priority	Performance Measure
Undertake bank restoration works through revegetation – planting tubestock at the top of the bank and placement of rocks.	<i>Casuarina glauca</i> and native plantings protect and strengthen the midden from erosion caused by wave action and strong tidal action.	MWC	M	Native vegetation has successfully established.
Encourage <i>Casuarina glauca</i> seedlings to regenerate from existing plants in the foreshore area, by suckering (this is already occurring a little higher up the bank).	The foreshore bank is protected from further erosion.	MBB	M	Seedlings visible, no further undercutting of the bank has occurred.
Install signage to protect littoral zone (see action below for habitat conservation)	Impacts causing erosion are mitigated or minimised.	MWC	M	

**Habitat Conservation**

<b>Key Strategies and/or Actions</b>	<b>Desired Outcome</b>	<b>Responsibility</b>	<b>Priority</b>	<b>Performance Measure</b>
Implement the recommendations of the flora and fauna assessment, as follows: Domestic animals such as dogs and cats are prohibited from the Island	Habitat for native fauna is conserved and enhanced. Native habitat is not adversely impacted by visitation to the Island.	MBB	O	Signage is installed and there is no evidence of exotic mammal species on the Island.
Undertake additional baseline fauna survey in summer (November – March)	An assessment of fauna is undertaken within a year of the adoption of the plan.	MBB	M	Assessment completed by March 2004
Integrate Bar Island into Council's fauna management program.	Faunal species diversity and abundance is maintained or increased.	MBB	O	Fauna surveys undertaken and reports prepared for Council.
Install signage to keep people out of littoral mangrove habitats	Native habitat is not adversely impacted by visitation to the Island.	MWC	M	Signage installed.



### Fire Management

Key Strategies and/or Actions	Desired Outcome	Responsibility	Priority	Performance Measure
Selectively remove vegetation from the mid-stratum and understorey, within a 30m radius of the church ruins, and cemetery.	Culturally significant relics on Bar Island are given an appropriate level of protection to minimise potential adverse affects of bushfires.	MBB	H	Bushfire protection measures are implemented and maintained. In the event of a fire, sufficient vegetation has been removed to prevent damage to heritage objects.
Monitor fire regime to ensure appropriate periodicity.	Ensure biodiversity conservation.	MBB	O	.Natural or semi-natural fire periodicity is maintained.

### Aboriginal Heritage

Key Strategies and/or Actions	Desired Outcome	Responsibility	Priority	Performance Measure
If disturbing or changing use, undertake Aboriginal archaeological assessment of Bar Island, including accurate site survey.	Further understanding of the Aboriginal archaeological significance of Bar Island is obtained.	MBB	M	Aboriginal archaeological assessment undertaken within 2-3 years of adoption of the plan.
Update NPWS sites register with further information that has been or is in the future uncovered about the Aboriginal significance of Bar Island.	The Aboriginal cultural heritage values of Bar Island are recorded to facilitate conservation and management.	MTPS	L	NPWS site register listing for Bar Island is updated following the Aboriginal archaeological assessment.
Undertake liaison with NPWS and local Aboriginal groups prior to the pathway construction over the midden and foreshore erosion and bush regeneration works in the area of the midden	The past present and future Aboriginal cultural significance of Bar Island is conserved and enhanced.	MBB	M	Aboriginal values of the site are taken into consideration with all important management decisions that are made.

## 7.0 ACTION PLAN

PSB 02837: Bar Island Draft Plan of Management

### European Heritage

Key Strategies and/or Actions	Desired Outcome	Responsibility	Priority	Performance Measure
Implement the recommendations of the cultural heritage assessment:	The European cultural heritage value of Bar Island is conserved and enhanced.			Recommendations implemented
Nominate Bar Island for inclusion in the State Heritage Register and the Register of the National Estate.	The heritage significance of Bar Island is recognised at a state and even national level.	MTPS	I	Statutory heritage significance of Bar Island is raised to at least state significance.
Undertake detailed recording of the site to archival standard, in accordance with NSW Heritage Office (1998) Heritage Information Series: How to prepare archival records of heritage items.	The European cultural heritage values of Bar Island are recorded to facilitate conservation and management.	MTPS	I	Archival recording undertaken prior to any works.
Amend Schedule D of the Hornsby LEP to upgrade listing of church and cemetery to State significance.	The state and even national significance of the church and cemetery on an island is accurately reflected in the LEP	MTPS	H	The listing is amended.
Investigate potential funding sources to undertake conservation and management works, and maintenance of the graves.	Funding assistance is provided to facilitate heritage conservation works.	MTPS	H	Liaison with government agencies (such as the NSW Heritage Office) and the local community is undertaken to source potential funds.
Consider applying to the NSW Heritage Incentives Program to assist with funding for conservation, management and interpretation of Bar Island heritage (including the midden works).	Funding assistance is provided to facilitate heritage conservation works.	MTPS	M	Application made for next program running in 2004.
Implement measures to conserve the "HE BRITTEN" inscription on the sandstone rock on the pathway - divert the pathway around the rock, so that it is no longer used as a stepping stone.	All elements of cultural significance on Bar Island are conserved through implementation of management recommendations.	MBB	M	Pathway diverted in conjunction with the pathway works in the midden area.

Key Strategies and/or Actions	Desired Outcome	Responsibility	Priority	Performance Measure
Obtain detailed quote for repair works to cemetery and chimney.		MTPS MBB	I	Quote obtained immediately upon adoption of the plan.
Repair cemetery in accordance with recommendations (refer Appendix B, and the 1996 Conservation Plan, section 8.3.1, 8.3.2, 9.5.4, 5 & 10): <ul style="list-style-type: none"> <li>Repair of broken headstones</li> <li>Reinstatement of loose elements</li> </ul>	Cemetery monuments are conserved using best practice conservation methods	MTPS MBB	M	<ul style="list-style-type: none"> <li>Headstones repaired within 2 years of adoption of the plan</li> <li>Loose elements fixed within 2 years of adoption of the plan</li> </ul>
Repair chimney in accordance with recommendations (refer Appendix B, and the 1996 Conservation Plan, section 8.3.2 & 9.5.5), and/or as subject to engineering details: <ul style="list-style-type: none"> <li>Assessment of stone requirements by a stone mason</li> <li>Repair of chimney</li> </ul>	The church remains are conserved using best practice conservation methods	MTPS MBB	H	<ul style="list-style-type: none"> <li>Stones and other materials acquired.</li> <li>Chimney repaired immediately following adoption of the plan</li> </ul>
Repair memorial lookout in accordance with recommendations (refer Appendix B).	The memorial is conserved using best practice conservation methods	MTPS MBB	M	Repair works undertaken
Liaise with the relatives and descendants and local community and ask for their response to the conservation works for individual graves.	The local community and relatives and descendants of those buried on the Island are more closely involved in the conservation works.	MTPS MBB	M	All restoration works have been completed within 3 years of adoption of the Plan.

**Landscape Character**

<b>Key Strategies and/or Actions</b>	<b>Desired Outcome</b>	<b>Responsibility</b>	<b>Priority</b>	<b>Performance Measure</b>
Carry out heritage conservation works, bush regeneration, and erosion control works. Assess any works such as construction of a jetty, signs, fences, path construction for the impact on the view from the surrounding waters.	<ul style="list-style-type: none"> <li>Retention of the existing landscape character.</li> <li>Restoration of cultural and natural elements to conserve these important elements that contribute to the value of the Bar Island landscape.</li> </ul>	HSC	O	<ul style="list-style-type: none"> <li>Heritage conservation and restoration measures carried out in accordance with the provisions of this Plan.</li> <li>Any works visible from the surrounding water are appropriate to the desired character for the Island.</li> </ul>

**Use of the Land**

<b>Key Strategies and/or Actions</b>	<b>Desired Outcome</b>	<b>Responsibility</b>	<b>Priority</b>	<b>Performance Measure</b>
Investigate potential funding for rebuilding the jetty through the Waterways Asset Development And Management Program (WADAMP)	Funding assistance is provided for management works.	MDC	M	Funding application submitted
Reinstate the jetty to the extent required. However, no further reinstatement of the jetty is recommended.	A small jetty has been reinstated to facilitate access to the Island.	MDC	M	A new jetty landing is constructed.
Undertake pathway re-construction works over the midden area following recommendations of the plan.	Conservation of the midden whilst maintaining current access.	MBB	M	Pathway constructed and midden stabilised
Install durable signage to indicate permissible and appropriate uses for the Island	Activities and human use on the Island does not lead to further degradation of the natural and cultural heritage features of the Island.	MBB	M	Signage has been installed.

<b>Key Strategies and/or Actions</b>	<b>Desired Outcome</b>	<b>Responsibility</b>	<b>Priority</b>	<b>Performance Measure</b>
Monitor visitation to the island, in particular levels, movement trends and visitor impacts on built and natural heritage elements on Bar Island.	Activities and human use on the island does not lead to further degradation of the natural and cultural heritage features of the island.	MPL	O	Regular monitoring of visitor usage and impacts.

**Interpretation**

<b>Key Strategies and/or Actions</b>	<b>Desired Outcome</b>	<b>Responsibility</b>	<b>Priority</b>	<b>Performance Measure</b>
Install interpretive elements on-site.	The heritage value of the island and the history of components is interpreted on-site in an appropriate and sympathetic manner in accordance with the objectives of the Plan.	MBB	M	Interpretive elements are installed.
Prepare interpretive material about Bar Island to be available to the local and broader community and distribute to interested community groups.	Information is available to the local and broader community interpreting the natural and cultural heritage values of Bar Island.	MTPS MBB	L	Interpretive brochure / package prepared
Re-install plaques that have been removed from the site in their original position, where possible.	Existing fabric of the island is enhanced	MTPS MBB	L	Plaques re-installed

**Compliance Issues**

<b>Key Strategies and/or Actions</b>	<b>Desired Outcome</b>	<b>Responsibility</b>	<b>Priority</b>	<b>Performance Measure</b>
Undertake regular monitoring inspections of Bar Island, and further investigate the feasibility of setting up an honorary ranger system.	A custodial presence is established over Bar Island to protect the significant cultural and natural attributes of the Island.	MWC/MBB	O/H	Monitoring of Bar Island is undertaken on a regular basis, dependent on season and adaptive management response.
Commence an appropriate and regular maintenance regime coordinated with monitoring inspection.	Bar Island is maintained to appropriate standards, primarily to conserve natural and cultural heritage values.	MBB	O/H	Regular maintenance undertaken
Investigate feasibility of establishing an honorary ranger system, with other government agencies and local community involvement in monitoring Bar Island	The incidence of vandalism and inappropriate use is reduced through the fostering of surveillance opportunities.	MPL	M	Casual surveillance is undertaken by the community.
If community interest demands, establish a Friends of Bar Island group	The community is involved co-operatively in the management of management of Bar Island.	MBB	M	Group established



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