Supplementary Information

Barrenjoey Lighthouse
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1.1  
Relationship to main Conservation Management and Cultural Tourism Plan  

This Supplementary Information on the Barrenjoey Lighthouse supports the NPWS Lighthouses Conservation Management and Cultural Plan. It provides site specific Building and Site Description Overview, with information and analysis to assist the relevant NPWS managers translate the findings and recommendations of the main Plan into the site specific issues.  

This Conservation Management and Cultural Tourism Plan and this Supplementary Information supersede the Barrenjoey Lighthouse Conservation Management Plan prepared for AMSA in 1994.  

In accordance with the project brief, the information contained in Section 2 of this Supplementary Information has been drawn from the AMSA Conservation Plan but summarised and rearranged for consistency across the whole NPWS Lighthouses resource.  

The information on Aboriginal heritage and its significance to Aboriginal people, is based on the research and discussions undertaken by Mary Dallas during the preparation of the main Plan.  

The detailed historical background and building analysis contained in the AMSA Conservation Plan has been reproduced and is attached to this supplementary plan as reference material.
2.0 Understanding the Resource

2.1 Historical Background

ABORIGINAL MYTHOLOGY

The area was known to be occupied by the Guringai tribe. There are no known sites in the immediate vicinity of the Lighthouse Precinct however there are numerous sites in the area and three listed Aboriginal archaeological sites on Barrenjoey Headland, two middens and a cave.

There are no known myths associated with the headland, however the number of sites on the Headland and at Palm Beach suggest usage. The early European activity in the area was shell extraction for the burning of lime. This entailed the exploitation of a number of shell middens that the Aboriginal communities had created.

EUROPEAN DISCOVERY & EARLY SETTLEMENT

The headland was first named as “Barrenjuee” from the Aboriginal name for small wallaby by Governor Phillip in 1788, the name after many interpretations is now “Barranjoey” on Admiralty maps and “Barrenjoey” on road maps. The headland was once an island but was joined to the mainland through the formation of a tombolo (Palm Beach) at the end of the last ice-age (approximately 10,000 years ago.

Broken Bay was once, due to the Hawkesbury trade, a thriving port. The River was then navigable to Windsor allowing steamers carrying passengers and produce. The trade was extensively agricultural and also included the valued commodity, rum.

During these early years of the Bay’s use as a port, a stone jetty was constructed on the inner side of the Headland and a number of buildings erected to house Customs and cargo. The Customs Station established in 1843 included a wooden hut on top of Barrenjoey from which all vessels entering and leaving the port could be observed. A light was reputedly first displayed at Barrenjoey Head, from the wooden hut, in rough weather in 1855.

By this time the coal mines of Newcastle, were supplying the coal to heat Sydney, by means of active coastal trade. In fierce SE gales and sudden southerlies the New South Wales coast became very dangerous for sailing ships. Broken Bay and the sheltered waters of Pittwater were the only havens for mariners. In 1868 the first official lighthouse began operating when two wooden buildings, called the Stewart Towers, were erected and lanterns shown from them to guide mariners.

The Stewart Towers, named after the member for East Sydney who lobbied for their erection, were constructed as temporary navigation aids. The destructive nature of termites, bush fires and storms soon made it necessary to consider the construction of a more durable structure. In 1873 during the conference of the principle officers of the Marine Departments, it was recommended by Francis Hixon (President of the Marine Board of NSW) that a single permanent lighthouse replace the temporary Stewart Towers.

The need for the navigational aids around Broken Bay was highlighted by the number of wrecks in the area. Among the first of many wrecks was the schooner ENDEAVOUR in 1825. Three lives were lost in the wreck of the ketch TRAVELLER in 1868 and six died when the brig MINORA was wrecked in 1898.

DEVELOPMENT OF THE LIGHTHOUSE

James Barnet, the Colonial Architect made a survey of the headland in 1877 to determine the best location for the light. The land was then in private ownership and known as Larkfield Farm having been originally granted to James Napper in 1816.

Plans were subsequently prepared and the land ownership resolved. After some delay the foundation stone was finally laid in April 1880, by Miss Rosa Barnet, the Colonial Architect’s daughter. The event was witnessed by a number of people, who according to the Sydney Morning Herald of 17 April, had made an adventurous journey travelling through very rough bush track from Manly to Pittwater.

A bottle was placed under the foundation stone containing lists of the relevant governmental departments and various reports pertaining to the Lighthouses, also a copy of the then current newspapers and publications in addition to a medallion of Queen Victoria and several coins.
The buildings, light tower and three keeper’s quarters, were constructed from sandstone quarried on the headland, constructed by Mr Isaac Banks as designed by James Barret. It took twelve months to complete the construction, with materials being hauled from the jetty to the plateau by means of a trolley system. The optical equipment was supplied by Chance Bros of Birmingham, England. Two construction workers died during the construction of the light, one by drowning and the other as the result of an accident.
The present lighthouse and surrounding buildings were completed, and the light was first exhibited on 1 August 1881. The original light shown from the present tower was fixed red and featured four wick burners with red screens. The first keepers were the George Mulhalls, father and son, who had also tended the lamps of the wooden Stewart Towers.

The stone tower, as erected, stands 11.5 metres high with the lantern room and dome adding a further 8.25 metres to the overall height. The Headkeepers quarters and assistants quarters are built on a platform cut into the rear of the headland, within a series of sandstone walls creating a compound like environment, relatively protected from prevailing winds.

It seems a telegraph line was installed for the lighthouse. An earlier telegraph line is shown to have been laid between the Stewart’s Towers and shown on Barnets 1877 plan.

In June 1885 further misfortune occurred at the site when one of the Lighthouse Keepers, George Mulhall (senior), was struck dead by lightning. His remains were laid to rest in a grave on the upper headland. His widow was to survive him by only a year and was buried beside her husband.

During the 1931 a live aerial bombing range was established at the entrance of Broken Bay. A target consisting of a carley float was towed into position and anchored when required for the exercises. Bombing signals were installed at the Barrenjoey Lighthouse and monitored by the Keepers. The lighthouse boatsheds were used for the storage of the float and equipment.

The light underwent several improvements over the years. In 1932 it was converted to group flashing white automatic light, powered by acetylene gas. With automation the Lighthouse Keepers were no longer needed and withdrawn in the same year. Records show that twenty one Keepers and assistants with their families were stationed at Barrenjoey. The destaffing of the site left the area unprotected and the cottages were badly vandalised over the succeeding decades.

During the 1940s correspondence concerning the lease of the headland and cottages outlined certain conditions. A lease of a portion of the defence reserve including part of the lighthouse property required an agreement that no structures be erected or any other work be carried out that will obstruct view of or from the Lighthouse, Trig Station or Gledhill Lookout Cairn. Also should not interfere in any way with the Mulhall’s grave and old Lighthouse monument.

A memo to the property officer dated 1944 noted that the cottages at the lighthouse were broken into and one cottage in particular was damaged. A number of enquiries were made from this time relating the lease of the cottages and surrounding land. In 1949 approval was given the Warringah Shire Council for a permissive occupancy of an unleased portion of the defence reserve at Barrenjoey.

The cottages were finally reoccupied during the 1950s and have since been restored and altered according to the needs of the tenants.

In 1972 the light was converted to electric operation from mains power with a backup emergency battery start generator. The original optical lens supplied by Chance Bros. of Birmingham is still in use today with a focal height of 113 metres above sea level and a range of 19 nautical miles.
2.2
Description of the Setting

THE COASTAL EDGE

The headland projects northwards into Broken Bay and forms the southern entrance to that large waterway and to Pittwater. To the north is Bouddi National Park along the Central Coast, Lion Island and the northern shore of Broken Bay, which presents a dominant natural backdrop to the waterway.

Broken Bay features three island Nature Reserves. Lion Island, located just inside the entrance to Broken Bay and visible from Barrenjoey, was originally dedicated as a fauna reserve and was reclassified as a nature reserve under the National Parks and Wildlife Act 1967. Long Island and Spectacle Island Reserves are located further up river, were both dedicated in 1972 and are important for their natural and cultural values.

Barrenjoey Headland is located at the northern end of Palm Beach and forms a dramatic geographical conclusion to the Northern Beaches. It is separated from the nearby residential suburbs of Whale Beach and Palm Beach by a long spit of land or tombola and is visible from those suburbs, with the lighthouse forming a visual focus for the natural features of the headland. The tombola is now utilised by a golf course and passive recreation and represents a contrast in form and character to much of the natural backdrop of the area.

To the west, Ku-ring-gai National Park defines the western side of Pittwater, with West Head as the most prominent topographical feature. West Head is an extremely popular tourist destination, as a short stay viewing platform for the outer sections of Broken Bay. It features an excellent viewing spot for the Barrenjoey Lighthouse, Headland and surrounding Pittwater and Broken Bay.
THE HEADLAND

As noted above, Barrenjoey Headland is located at the northern end of Palm Beach. The headland curves into Broken Bay and around to Pittwater which flanks the western shores of the headland. The essentially natural character of the headland contrasts with the important urbanised backdrop of Palm Beach. It also links with the natural setting to the north and west.

A number of cottages are located on the edge of Pittwater beach on the western side of the headland. Access to the Headland Lighthouse precinct is by walking along the Pittwater Beach and taking the relatively rough flag stone and cut stone road that climbs to the summit. There is also another walking trail, which follows the old smugglerstrail.

Barrenjoey Headland is relatively undisturbed and retains plant associations typical of those that have been cleared on other headlands with much weed infestation in the Sydney region. Black she-oak scrub covers much of the area, which is exposed to the ocean winds. Open woodland and littoral rainforest are found in sheltered areas on the headland. There are some selected cultural planting of coral trees near the base of the roadway up to the Lighthouse. The stone flagging and the access roadway is generally in poor condition.

The rock platforms are relatively inaccessible and have suffered less from scavenging than most Sydney platforms. Together with the associated rocky reefs and the sea grass beds of the sheltered bay, they form a valuable littoral and sub-littoral environment.

The Lighthouse Precinct, located at the summit appears as a small group of buildings hidden behind the trees which appear to have been planted within the last 25 years. These trees generally obscure the buildings and reduce the visual effect of a precinct. The stone Lighthouse tower dominates the skyline.

There are a number of other features on the headland summit, including the original quarry for the buildings, graves, cairn, lookout markers and water tanks. At the rear of the houses and in front of the tower random stone terracing was constructed. It essentially remains in its early form although it has been affected by time and growth of vegetation. There may also be defence sites and features on the headland including the searchlight mounting, a concrete footing for the

searchlight mounted during World War 2 adjoining the Trig Station.

A flagstaff is also known to have been located near the Trig station. It is believed that this was blown down in 1950. A number of eyebolts remain to mark its location. In addition to this western flagstaff, there is also documentary evidence of an earlier flagstaff. Shown on Barnett's 1877 plan it was probably associated with the Stewart Tower. A c.1885 photograph possibly locates the flagstaff near the present day Gledhill cairn. The cairn/obelisk was unveiled in 1935 on the site of the Stewart Towers. Named after PW Gledhill, a noted local historian.
BARRENJOEY LIGHTHOUSE
COASTAL EDGE ZONE, 1998
Not to Scale
D.M. Taylor Landscape Architects Pty. Ltd.
ABORIGINAL RESOURCES

There are numerous middens, sheltered camp sites and engraved and painted art sites on the headland and at Palm Beach.

Eight sites, essentially spit middens and camp sites and engravings, in the area of the headland, around the Lighthouse and Palm Beach appear on the NPWS Register (5-6-096; 5-6-0713-0716; 5-6-0723; 5-6-0973; 5-6-0918-0922; 5-6-1517-19 and 5-6-1665-6).

Some archaeological surveys have been conducted but none on the actual headland. There are no known sites in the immediate vicinity of the Lighthouse Precinct. Potential sites include middens, camp sites and engravings which will require comprehensive survey in the immediate vicinity of the Lighthouse, access roads and walking trails.

THE LIGHTHOUSE PRECINCT

Barrenjoey Lighthouse is located on the Barrenjoey Head at the southern entrance to Broken Bay. The lighthouse reserve is about 10 hectares in area, the remainder of the headland being part of Ku-ring-gai Chase National Park.

The tower, constructed of rough cut face sandstone quarried on the headland, stands to the north east within the unified complex. The three cottages and supporting outbuildings are also constructed of face sandstone with corrugated iron roofs. They comprise the standard arrangement of the main house and duplex and are cut into the ridge behind the tower, giving protection against the prevailing north easterlies.

This composition utilises a strong pattern of sandstone retaining walls to define the rear yards of the cottages and to link the main house to the tower. In addition the main house has a bay window to its principle facade, an unusual design feature for a Keeper's residence. The only other Head Keepers Cottage with a bay window is the earlier and now fire damaged Point Stephens group.

The landscape around the cottages contains introduced and domestic planting over the last two decades.

The cottages were heavily damaged by vandals in the decades after their abandonment as operational dwellings. Residents since this time have expended personal effort to repair and adapt the houses for their own use. Basic maintenance was also undertaken by AMSA, but only to a relatively low degree.
2.3
The Constructed Image

The Lighthouse Precinct essentially contains:

- The Lighthouse tower
- Headkeepers cottage
- Assistant keepers duplex residence.

Associated features include:

- Beach cottage and boatshed
- Two small beach shacks
- Access road and pathway to summit
- Flagstaff and Trig Station.

THE LIGHTHOUSE TOWER

The tower base is 4 metres high and octagonal in plan, featuring a number of small openings and Victoria Regina 1880 insignia carved in the stone. An oil room and corridor located in the base provides access to the tower.

The circular tower rises three storeys above the base and features the distinctive Barret style, large stone brackets supporting the gallery around the lantern. The walls of the tower are 900mm thick at the base tapering to 600mm at the top. The gallery around the lantern is capped with elegant gunmetal balustrade.

Internally the tower features iron floors connected by iron staircases.

The Lighthouse tower is connected to the Head Keeper’s cottage by a covered stair with a windbreak wall and is currently surrounded by a man proof fence as protection against vandalism. It is the only face sandstone tower in the NPWS collection and is liable to vandalism.

The light operates as a navigational aid for recreational boating in Pittwater.

HEAD KEEPER’S COTTAGE

The Head Keeper’s Cottage is constructed in sandstone and features timber floors and a corrugated steel pyramidal pitched roof which sweeps down over external verandahs. The north western facade features a bayed window section flanked by open verandahs which also extend around to the southern side of the building.
The bayed section looks into a courtyard area which is enclosed by sandstone walling. A covered way extend from the north eastern corner of the building and verandah to the lighthouse former oil room and tower.

The slope of the ground makes the building two storeys high on one side, the structure is split level with half basement level. The basement features a kitchen with fireplace, service areas and courtyard enclosed by a massive rubble wall and with a privy in the south east corner. A stair connects it to the upper, main level which features six rooms about a central hallway. The six rooms, currently four bedrooms, storeroom and sitting room with north facing bay window also feature five fireplaces. Internal alterations have been made by the tenants.

The walls of the buildings were dressed and coursed, but also included rubble stonework for the terracing and were plastered internally. The automation of the lighthouse in 1932 left the buildings unprotected. As a result much of the original interiors were destroyed. What is seen today is largely the result of the effort of the tenants of the building.

An underground water tank was provided to the cottage and is located under the courtyard area.

ASSISTANT KEEPER’S COTTAGES

The Assistant Keeper’s cottages are semi detached and symmetrical about a central party wall. Each residence is generally surrounded by verandah and accessed via a stair to its north. Like the Head Keeper’s cottage they are split level and another stair connects to the service building at its rear.

Each residence essentially consists of four rooms about a central corridor in addition to the service block and privy in the rear courtyard. Verandahs shade the principle rooms. Also constructed of sandstone they feature timber floors and a single hipped roof clad in corrugated steel which spans over both residences.

The rear yard area is enclosed by a sandstone wall and two underground water tanks are located in the space between the main building and the service structure.

The internal walls of at least one of the two dwellings, have been completely stripped of their internal finishes. Much of this work was in response to earlier vandalism damage. Joinery has been reconstructed and the rooms adapted to suit the current occupants’ lifestyle.

COTTAGES & BOAT SHED

There is a cottage and boat shed are located south west of the lighthouse complex, on Barrenjoey Beach facing Pittwater. Two other small cottages are located further along the beach to the north. The larger cottage may be associated with the Customs operations established in 1843 which remained in operation until the end of 1900. However it appears likely that the cottage was constructed around the time that the lighthouse was automated in 1932. Like the lighthouse buildings, they have been tenanted in the past years.

The timber framed and weatherboard clad cottage features four main rooms flanking an open west facing verandah and several other rooms to their rear. The building features timber floor and colorbond corrugated steel roof.

The smaller cottages are essentially beach shacks, with lightweight cladding materials on a timber frame.

It is believed that the rear yard of the larger cottage formerly featured a vegetable garden, although it has not been determined if this relates to the former Customs Station or the Lighthouse. A number of Coral trees presently surround the cottage and the adjacent boathed.

The boat shed was constructed in the 1970s by the Nott family, tenants of the one of the Lighthouse buildings. It is a small, timber framed structure, clad in AC sheet with concrete floor and colorbond corrugated steel roof.

ACCESS ROADWAY

The access roadway is a significant feature of the headland, even though it is not the original access to the lighthouse. It is partially formed by sandstone flagging and partly cut into the natural rock formation. It weaves its way up from the larger of the cottages on the beachfront and passes the site of the original quarry which was the source of the building stone. The roadway is in generally poor condition, even though it is the major pedestrian and 4WD drive access to the summit.
FLAGSTAFF & TRIG STATION

An early 20th century photograph shows that a flagstaff was located just to the north of the lighthouse. In addition there was a western flagstaff, the location of which is not known. An early flagstaff is shown on Barnet's 1877 plan and is associated with the Stewart Tower at the eastern point of the headland.

A flagstaff is also known to have been located near the present trigonometrical station. It is believed that this was blown down in 1950, however a number of eyebolts remain to define its location.

The trig station is believed to have been established about 1884.
2.4 Significance

Barrenjoey Lighthouse is a substantial and relatively intact 19th century lighthouse of outstanding architectural quality, containing a rare Chance Bros 700mm fixed optic and pedestal. The complex of buildings at the Barrenjoey Lighthouse are the oldest remaining structures in Pittwater and remain as evidence of the earlier coastal shipping use of the Bay and Hawkesbury River.

It is an important and representative example of the so called “coastal highway lighthouses” that were erected along the NSW coastline between 1862 and 1903.

The cottages and boathed on the beachfront are of lesser significance than the tower, cottages and various site elements, including the access roadways associated with the historic Lighthouse operation.

HISTORIC SIGNIFICANCE

The Lighthouse is significant as an important element in the establishment of navigational aids along the NSW coast which reflects the economic development of the surrounding region and part of the most productive phase of Lighthouse construction in NSW, in the early 1880s.

It is an important component of the system of great 19th century lighthouses designed to light the coast, in contrast to the harbour lights. It is one of the great so called “coastal highway lights”.

The various remains, original and associated features are significant for the role they played in the early navigation and coastal shipping network, and by their association with the functioning and role of the lighthouse complex.

AESTHETIC SIGNIFICANCE

Barrenjoey Lighthouse is a significant intact example of a late Victorian lighthouse designed by James Barnet, NSW Colonial Architect, in 1881. The light tower is perhaps the finest of Barnet’s towers because of its attractive rusticated face sandstone construction and strong brackets supporting the upper balcony.

The cast iron stair in the lighthouse, although not unique is a very good example of its type.

Barrenjoey retains it distinctive outward curving gunmetal balustrade which is a mark of Barnet towers. It is similar in style to Sugarloaf and Smoky Cape, in this respect.

The Barrenjoey Keepers’ Cottages display the typical robustness of the Barnet design being the Victorian Georgian style used extensively by the NSW Colonial Architect’s office throughout the late 19th century. They are constructed in ashar stonework of considerable quality, with high stone garden walls and substantial retaining walls which also distinguish them from other comparable designs. However, following earlier vandalism virtually none of the internal finishes have survived.

The headland is a dramatic landform of great natural beauty. The lighthouse tower provides a counterpoint and human scale. While the vegetation has been modified over the—100 years it contributes to the evocative nature and character of the place.

SOCIAL SIGNIFICANCE

The lightstation and the Mulhall Graves are significant for providing evidence of the changing living and working conditions of the lighthouse keepers and their families.

From its initial construction to the present day the lighthouse has generated a great deal of local and general interest. It is a popular destination for informal walks by local residents and those from greater Sydney.

SCIENTIFIC SIGNIFICANCE

The lighthouse retains the original Chance Bros. cast iron and copper lantern house. The lantern is a beautiful example of the 19th century industrial technology and is intact apart from some modernisation. Barrenjoey has an unusual optic that is fixed and sits on its original cast iron main pedestal. The place retains its disused 1932 acetylene sun valve and flasher.

The tower is of considerable industrial archaeological significance in its ability to demonstrate the evolution of lighthouse technology. The headland itself potentially has great archaeological significance, retaining elements with various associations that demonstrate the former uses and evolution of the place, including the stone flagged access roadway and quarry site.
SIGNIFICANCE TO ABORIGINAL PEOPLE

The significance of this site for the local Aboriginal community relates to the land on which the lighthouse sits and not to the lighthouse itself.

There are a number of Aboriginal sites on the headland which provide information on the pre-European use of the area.

The Local Aboriginal Land Council regard themselves as custodians of the land and Aboriginal cultural sites.

ELEMENTS OF PRIMARY AND CONTRIBUTORY SIGNIFICANCE

Grading the comparative significance of various elements or characteristics of an historic place or building is a useful management approach to support future programmes of detailed fabric or artefact conservation.

The majority of the conservation management plans prepared for AMSA included a graded table of significance for the various components of the lighthouse complexes, including landscape and archaeological features and of individual buildings.

The subsequent allocation of graded levels of significance in some of the CMPs is considered by this consultant to be overly complex and not beneficial in terms of providing a clear background to the conservation and management of building fabric or other elements.

The conclusions reached by the consultant team preparing this overall Conservation Management Plan have taken a different emphasis.

The characteristic considered to be the most important in relation to the NPWS Lighthouses is the manner in which they have evolved progressively while retaining their essential integrity and significant features. Accordingly a three tier significance rating has been adopted.

- Characteristics of Primary Significance
- Characteristics of Contributory Significance
- Characteristics of Little or No Significance

Primary Significance:

All those elements and features that relate to the initial construction and operation of the particular Lighthouse and its supporting buildings and infrastructure. It includes the pre-existing topographical and landscape characteristics, initial cultural landscape features and sites of Aboriginal cultural significance.

Contributory Significance:

All those elements which relate to the subsequent use and development of the place as an operational Lighthouse, right down to the period when they were transferred to NPWS. It includes subsequent natural and cultural landscape features and post contact period sites and places of Aboriginal cultural significance.

Elements Of Little Or No Significance:

Generally only those items which relate to the subsequent re-use and development of the place after it was transferred to NPWS.
3.0 Constraints & Opportunities

This section confirms the listing status by various heritage agencies for the Barrenjoey Lighthouse and summarises the views of relevant community members or representatives.

Refer to the main Plan for guidance with regard to the appropriate responsibilities and actions to be taken in relation to these listings and viewpoints.

3.1 Heritage Recognition & Listing Status

NATIONAL AGENCIES

Barrenjoey Lighthouse is listed on the Register of the National Estate which is administered by the Australian Heritage Commission.

AMSA no longer requires the use of the Lighthouse, however they currently retain control of the Tower, under the terms of the Heads of Agreement, and the cottages, but are in the process of transferring them to NPWS. The cottages have long term leases.

OTHER STATE AGENCIES

The primary conservation and management framework for the Lighthouse is the NSW National Parks and Wildlife Act. The site of the Lighthouse complex is not currently gazetted within the Ku-ring-gai National Park, but should be added to it. The Park is managed under the Ku-ring-gai National Park Plan of Management. This will need to be amended in accordance with the recommendations of this Plan.

Barrenjoey Lighthouse is contained within the NPWS s170 Heritage and Conservation Register, under the NSW Heritage Act and Heritage Amendment Bill 1998.

Barrenjoey Lighthouse has been promoted by NPWS for listing in the State Heritage Register.

LOCAL GOVERNMENT

The Lighthouse is included in the Pittwater Municipal Council Local Environmental Plan as an item of Environmental Heritage. It is identified as the oldest item in the Pittwater area.

NATIONAL TRUST OF AUSTRALIA (NSW)

Barrenjoey Lighthouse is classified by the National Trust of Australia (NSW).

ABORIGINAL COMMUNITY

The Barrenjoey Headland and surrounding area was known to be inhabited by the Guringai Tribe. Other associated groups include the Metropolitan LALC.

Native Title claimant group is the Bongarri Clan of the Darkungung Country People, whose claim includes land from Newcastle to Manly to 96 kilometres inland including the Barrenjoey peninsula and lighthouse.

Consultation with the Aboriginal community is presently informal and this suits the present LALC. Procedures developed for the conservation management and promotion of sites at West Head, for example, are acceptable to the community.

The LALC would like to see joint management of all National Parks in its area including joint management of the Barrenjoey Headland concerning land management, site protection, cultural tourism and community access. They would also like to see the management style to remain informal but the management structure to be reviewed with the community committee.

There is currently no Aboriginal based tourism. Future interest in guided tours, including bush tucker and history tours is expected.

LOCAL COMMUNITY

There is currently much local interest in the headland and Lighthouse Precinct heightened by local volunteer groups such as Chase Alive, which is supported by NPWS and organise tours and walks. The Chase Alive visitor and ranger programme has been very popular and involves many local residents and should be encouraged and used in the promotion of the precinct.

Local programmes such as the Pittwater Festival attract much public interest and in the past have highlighted the headland and Lighthouse Precinct as one of the prime
attractions.

A life time tenancy and other shorter term tenancies currently limit the re-use of the residences.

TOURISM OPERATORS

At present, apart from the periodic tours and walks organised by groups such as Chase Alive, there is little organised tourism of the Precinct. The majority of visitation to the actual Precinct is by private and self guided groups making the trek to the summit.

Self drive and organised tour groups however visit West Head, which offers excellent views of the Lighthouse and surrounds and is easier to access and stop for short periods of time.

3.2 Conserving the Cultural Resources

THE CONDITION OF THE BUILDINGS & STRUCTURES

The Tower and the cottages are in fairly good condition, externally.

The tower is currently surrounded by vandal proof fence. The presence of on site residents possibly provides additional passive security. AMSA currently maintains the security fencing and tower, and will continue to do so until the site is transferred to NPWS. The tower requires stabilisation works to the annex roof, replacement of the colorbond roofing and relining of the internal ceiling boarding where there is water damage.

The Lighthouse cottages were heavily damaged by vandals earlier this century. They are currently leased to members of the public. Basic maintenance is also undertaken by AMSA, but only to a relatively low degree.

CULTURAL & NATURAL LANDSCAPES

The coastal zone of the Barrenjoey Peninsula is essentially natural with pockets of residential and small scale holiday and recreational development south of the headland on both the Palm Beach and Pittwater sides.

Palm Beach and Pittwater are major attractions for local residents, combining beaches and recreational boating. Palm Beach is one of Sydney’s most beautiful, natural and famous beaches, while the adjoining nature strips and housing development is highly regarded. The headland and lighthouse are major visual features in the recognisable topography of the locality.

The water and seascape is a significant aspect of the headland. Pittwater in particular during the weekends becomes a major area for boating and recreational use with large numbers of vessels and sea going craft in the water.

The Headland zone is also an essentially natural zone, the green cover enveloping the cultural aspects and in a sense obscures their visibility. Significant sections of forest and vegetation remain in addition to rock ledges and shelters. Weeds however seem to be a problem and in the past maintenance did not extend to natural landscape around the Lighthouse Precinct.

The essentially natural character of the Headland is considered to be very important, given the urbanised backdrop of Palm Beach and the areas around Pittwater to the south. There is some cultural planting around the cottages and coral trees near the larger beachfront cottage, but they do not detract from the essential nature of the headland.

The Lighthouse zone is not readily apparent as a unified cultural precinct, possibly due to the fact that the recently planted landscape envelopes and visually obscures the complex. The bounding walls and various connections to the various buildings and elements remain.

ABORIGINAL CULTURAL RESOURCES

While some archaeological surveys have been conducted and eight sites in the vicinity recorded no Aboriginal surveys of the headland have been completed. Potential sites include middens, camp sites and engravings and more comprehensive study is required.

A number of potential interpretive and research themes exist relating to the pre-historic occupation, the various sites, land and sea use, bush tucker and local archaeology.
HISTORICAL ARCHAEOLOGICAL RESOURCES

In addition to the Aboriginal component, the Lighthouse Precinct and headland environs have the potential to yield information about the pre Lighthouse use and development of the area, initial construction and subsequent use of the complex through the surviving archaeological material. It should be regarded as an area of high archaeological sensitivity.

Historical aspects include, the former Customs Station, the wharf and jetty areas, sandstone flagged access roadway, the trolley and track transport systems, quarry and telegraph line connecting to the Precinct to the more developed areas.

NAVIGATIONAL AIDS

NPWS will manage the tower once it is transferred from AMSA.

The state will use the light as a Navigational aid to provide a function for recreational boating in Pittwater.

3.3 Other Management Issues

PRECINCT & SITE MANAGEMENT

The situation with Barrenjoey, in terms of the transfer from AMSA to the State should be clarified, as AMSA currently retain control of the Lighthouse Tower and Cottages. Clarification of the terms of the transfer from AMSA, includes lighthouse buildings and small cottages at the base of the headland on the Pittwater Beach side.

AMSA have claimed that they also own one of the three cottages and boatshed at the base of the headland on the Pittwater Beach side.

The three cottages at the base of the headland are recognised as being of lesser significance than the main Lighthouse group, due to their more recent construction. This assessment can only be preliminary view, given the historic nature of the customs activity that took place in the vicinity in the 19th century. It is apparent that the full heritage significance of the customs operation has not been fully researched or survival of any physical evidence fully revealed.

Good conservation practice in relation to the three beach side cottages suggests that they should be retained and conserved in recognition of their contribution to the overall headland story and their potential to interpret the history of the earlier customs station. Conservation should be by adaptive re-use which may include both interpretation and re-use for short stay holiday accommodation.

If the buildings were simply researched, recorded and demolished, it would wipe away another cultural layer of the headland, albeit a supporting one to the two main periods of occupation related to the customs period.

Irrespective of their potential cultural value, the cottages represent a good opportunity in cultural tourism terms to raise revenue for the Service by the adaption of the existing structures. The Cape Byron Headland Trust is taken a similar approach—towards several beach cottages, where conservation by adaption to holiday accommodation is likely to yield excellent funding for the Service to undertake other conservation works in the larger precinct.

Any examination of the re-use potential for these cottages will need to examine the environmental impacts on the adjacent parkland arising from the installation of toilet systems and other infrastructure. Visitor management issues will need to be carefully handled, and no visitor cars allowed to be parked in the open near the cottages.

The larger house, at the base of the walking track is subject to occasional flooding.

The protection and management of the natural values of the Headland are given the highest priority by the District. These values are regarded as being at a national level. AMSA did not manage the landscape and there is a great deal of work to do to recapture the natural values. There are some areas of bad weed infestation, especially on the southern face of the Headland and other areas where heavy use has degraded the bushland. About $332,000 has been spent to date. There is strong community interest in bush regeneration.

Basic access to the Headland Lighthouse precinct is by walking along the Pittwater Beach and taking the relatively rough historic sandstone flagged roadway that climbs to the summit. There is another walking trail, which follows the old smugglers trail. This is gradually being upgraded by NPWS to form a
circuit trail to the summit and back. The work includes rebuilding some old stone steps to match an earlier form.

Once at the summit there is not a strong sense of a cultural precinct, just a few buildings hiding behind trees, on the rear face of the ridge. The immediate precinct should be made more distinctive, supported by cultural landscape research to determine its earlier character.

There is concern that there could be a conflict between pedestrians and vehicles on the 4WD roadway to the summit, given its narrow and rough nature. To date this has been kept under control by the relatively small volume of vehicular traffic on the road. There is also a concern about the lack of fences in areas of risk where the public is being encouraged to walk.

The existing access road is quite rough and suitable only for 4WD vehicles, although their impact on the archaeological value of the sandstone paving must be carefully monitored. Vehicles are required to drive along the Pittwater Beach from the Council carpark area before accessing the road. It is barricaded to prevent unwanted intrusion and is primarily used and partly maintained by the headland residents. The need to protect the character of the headland is such that vehicle access on this roadway and to the summit must be strictly limited.

The foreground to the Headland, when approached from Palm Beach, is the extensive Council Car Park. 24 hour parking is permissible but expensive.

An area of the headland which was used for rock climbing has been closed down as the activity was damaging the bushland.

The Keepers’ cottages are provided with septic tanks but only minimal services. NPWS are concerned that there may be septic tank run off into the National Park areas of the Headland. Given the sandstone outcrop nature of the geology it is important to understand the current impacts of the septic tank system before considering any alternative systems.

There is a reluctance to install any form of toilets for visitors to the precinct, largely on the basis of the likely impact on the park values. It may be necessary to install signage down at the beach indicating that there are no toilets or drinking water available at the summit. The nearest public toilets are located at the Surf Club.

BUILDING CONSERVATION & RE-USE ISSUES

The Lighthouse Tower is surrounded by a man proof fence as protection against vandalism. It is the only face sandstone tower in the NPWS collection and is thus potentially more liable to vandalism.

The internal walls of one of the Assistant Keepers’ cottages have been completely stripped of their internal finishes. Joinery has been reconstructed and the rooms adapted to suit the lifestyle of the occupant.

Re-use of the cottages is not expected to become a possibility for some time, due to ongoing tenancy arrangements. As the cottages become available in the medium to long term, the preferred option is for their re-use as a combination of the site management, interpretation, retail and visitor services and short term holiday accommodation. This will eventually bring the Barrenjoey cottages into the same model as the majority of the other NPWS Lighthouses. The beach cottages and boathouse can also support this overall model.

TOURISM MANAGEMENT ISSUES

The Headland is a popular walking destination, as are many other headlands around the Harbour and coastline of Sydney. Many locals walk there regularly and it is popular day trip destination for Sydneysiders. The walk has a degree of difficulty and the sense of achievement at the summit, where the Lighthouse and the spectacular views are rewarding. Most people visit the summit for only brief periods. At present the state of the trails around the summit is not such that they encourage walkers to leave the central clearing near the lighthouse. People still walk up to the Headland at night, which is a major safety, security and insurance issue on the relatively rough track.

Palm Beach and Pittwater are major attractions for local residents, combining beaches and recreational boating. The Headland and the Lighthouse are major visual features in the recognisable topography of the locality. Council has apparently estimated that some 200,000 people per annum access the Headland.
There is no roadside signage in the Palm Beach area which indicates that there is an historic lighthouse on the Headland.

The Council carpark is a natural control mechanism for the number of people who use the Headland. There are many other competing uses for the carpark, such as the beach and the golf club, and it is a long walk from other parking areas.

Visitation by boat is not a real option, despite the popularity of recreational boating in Pittwater. The water at the northern end of the Pittwater beach is not regarded as good for navigation and is very shallow. Other parts of Pittwater are more popular for mooring. It is almost impossible to get NSW Waterways to co-operate in charging fees for NPWS waterway usage.

Charging a fee for access to the Barrenjoey Headland or the Lighthouse precinct is not currently considered feasible. It is used on a regular basis by many local Sydney and residents, who are used to having free pedestrian access to their headlands.

West Head is an extremely popular tourist destination, as a short stay viewing platform for the outer sections of Broken Bay. Access is by self drive car and buses, through the larger reaches of the Park. It is well managed by NPWS and attracts in excess of a million domestic and international (50%) tourists per year.

West Head is considered to provide a good viewing spot for the Barrenjoey Lighthouse and Headland. From here the existing high levels of visitation can be easily managed, without placing any pressures on Barrenjoey. It could provide an important interpretation location. What is missing is the personal experience of viewing the lighthouse up close or possibly climbing the tower at some future date. However, tourism would need to be carefully managed.

It is likely that any active visitor programmes to the Lighthouse can be implemented over time, and may not reach a high level until the situation with the transfer and the tenancy is resolved.
RECENT ACTIVITIES

Recent activities include:

- Much of the recent effort has been in bush regeneration and weed control on the Headland.
- Upgrading of the track
- Fox eradication study
4.0 Primary Conservation Policies for the Barrenjoey Lighthouse

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part D of the Conservation Management and Cultural Tourism Plan, the following primary policies establish the essential conservation framework for the Barrenjoey Lighthouse.

- The Barrenjoey Lighthouse shall be retained and managed by NPWS as a key contributing component of the overall NPWS Lighthouse Collection.

- The Conservation Policies and Implementation Guidelines contained in the overall Conservation Management and Cultural Tourism Plan shall be applied, as appropriate, to the Barrenjoey Lighthouse.

- NPWS shall, upon resolution of the transfer, gazette the Lighthouse site as part of the adjoining Ku-ring-gai National Park, in recognition of its complex cultural and natural significance.

- NPWS shall conserve and manage the lighthouse complex as a collection of fine historic buildings and supporting site features that clearly express its original functional role and which has gradually evolved since initial construction in response to progressively developed coastal navigation technology and organisational practices. Recognition and respect for the evolving development of the complex from 1881 until the mid 1930s shall form a key basis for conservation and management of the buildings, technology, artefacts, archaeological sites and infrastructure. Refer to Section 17.1 of the main CM&CTP for the Conservation Principles related to fabric, features and associated artefacts of differing significance.

- In addition NPWS shall give some recognition to the history of the Lighthouse and cottages, including the development of the cottages on the beachfront, since the time when the Lighthouse was automated and the staff withdrawn.

- Conservation of the Barrenjoey Lighthouse shall protect, respect and where appropriate enhance the identified and closely interrelated characteristics of cultural and natural significance of the place, in its own right and as a component of a larger state, national and international network of late 19th and early 20th century lighthouses.

- All essential and outstanding catch-up repair and conservation works to the buildings and site elements shall be undertaken within a period of one year from the time when each building component becomes available.

- The buildings and site elements shall be conserved by the implementation and long term continuation of a rigorous, cyclical and appropriate maintenance regime, starting as soon as possible. This regime shall seek to maintain the buildings and site elements in a character and condition that equates to the time when the complex was an operating lighthouse facility, with a full time staff.

- NPWS shall conserve and manage the immediate site and setting as a modified natural landscape with important cultural landscape characteristics that clearly illustrate the development and occupation of the precinct as an operational lighthouse complex, from 1881 until the mid 1930s. There shall also be recognition of the other layers of cultural history on the headland, including the customs station, early light beacons, defence activities and public recreation.

- NPWS shall conserve and manage the wider Barrenjoey Headland as a natural landscape with cultural landscape features that illustrate the layers of human occupation and settlement, including that by Aboriginal people.

- NPWS shall conserve and manage the Aboriginal heritage characteristics of the Headland in consultation with the relevant representatives of the local Aboriginal communities.

- NPWS shall conserve and manage the complex and its setting in a manner which communicates and interprets the multi-layered nature of its cultural and natural significance to the general public.
- NPWS shall facilitate the on-going operation of the lighthouse tower by NSW Waterways as an operational navigation aid, following the resolution of the transfer of ownership.

- Once the tenancy issues have been resolved with the cottages and they become available, NPWS shall conserve and manage the complex by means of adapting the interiors of the former cottages and support buildings to new uses which are identified in the site specific Interpretation and Tourism Plans and which are compatible with their evolved architectural and spatial characteristics and cultural significance.

- NPWS shall continue to conserve and manage the complex in the context of the Barrenjoey Headland being a popular walking and recreational destination and lookout venue.

- When they become available, NPWS shall consider utilising the Head Keeper’s Cottage for a combination of site administration, interpretation, retail, food services and visitor facilities. Initially the Head Keeper’s Cottage could accommodate a caretaker and some visitor facilities, in order to maintain an appropriate level of site security. The Assistant Keepers’ Cottages shall be re-used as short term equitable holiday accommodation.

- The three seaside cottages and boatshed shall be conserved by adaption and interpretation as short term holiday accommodation and interpretative facilities. The larger cottage should continue as ranger accommodation for general site security reasons.

- There shall be no new permanent buildings erected within the immediate Lighthouse precinct. The design and positioning of any future navigational equipment or energy source infrastructure shall be carefully considered to avoid or minimise any adverse impact on the heritage or visual characteristics of the overall lighthouse precinct.

- NPWS shall severely limit the number of visitors’ cars that are permitted to enter the access roadway and the immediate precinct of the Lighthouse cottages, to those that are associated with approved visitor or management uses. All other cars shall be accommodated in the public carpark.

- NPWS shall conserve and manage the Barrenjoey Lighthouse in full recognition of the heritage and environmental management provisions of the relevant aims, objectives, standards and procedures of the Australian Heritage Commission, NSW Heritage Council, NSW EP&A Act, Regional and Local Environmental Plans, the National Trust of Australia (NSW), NPWS and good conservation practice as promoted by Australia ICOMOS.

- NPWS shall co-ordinate the marketing and promotion of interpretation and cultural tourism activities at the Barrenjoey Lighthouse, with the overall NPWS Lighthouses collective resource by reference to the Lighthouses Marketing and Promotions Unit within the Community Relations Division.
5.0
Site Specific Conservation Policy Implementation

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part E of the Conservation Management and Cultural Tourism Plan, the following guidelines establish the essential implementation framework for the Barrenjoey Lighthouse.

The Conservation Policy Implementation recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

These site specific recommendations are framed in the same categories as the Conservation Policies and Implementation Guidelines of the main Plan, for ease of cross reference.

5.1
Reference to Main CM&CT Plan

SHORT TERM

- Refer to the Conservation Policy and Implementation Sections of the main NPWS Lighthouses Conservation Management and Cultural Tourism Plan. All of the following policies and implementation recommendations should be read in association with the larger policy framework.

- Participate in the Service wide review and assessment of the CM&CTP.

MEDIUM TERM

- Give special regard to the NPWS management recommendations and other general policies contained in the CM&CTP. In this regard, ensure that close liaison is maintained with all relevant stakeholders, particularly those concerned with heritage management and tourism operations.

- Manage the site in accordance with general NPWS management policies and guidelines.

- Review and update the Ku-ring-gai Chase National Park Plan of Management in accordance with the findings and recommendations of the final CM&CTP.

- Facilitate the co-ordination of the Barrenjoey Lighthouse conservation management and cultural tourism activities with the remainder of the NPWS collective resource. In particular contribute experiences and lessons to the other Lighthouse managers through the Lighthouse Reference Committee.

The following recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

5.2
Aboriginal Heritage Conservation Policy Implementation

SHORT TERM

- Review the findings of recent Aboriginal site surveys and the previously collected knowledge.

- Review the current consultation processes with representatives of the Aboriginal community.

- Prepare medium term plans for undertaking further site surveys which will enhance the overall understanding of the Aboriginal cultural resources.

MEDIUM TERM

- Undertake additional research and site surveys to expand the knowledge of Aboriginal cultural resources.

- Refine and expand the consultation process, utilising an appropriate consultative mechanism with the local Aboriginal community. This should also address issues of Aboriginal involvement in planning decisions.
- Maintain active liaison regarding any Native Title issues that may relate to the Headland and the Lighthouse precinct.

LONG TERM

- Continue active consultation with the Aboriginal community to expand the understanding of their cultural heritage and involvement with the management and cultural tourism programmes at the Lighthouse and the headland generally.

5.3 Landscape Conservation Policy Implementation

SHORT TERM

- Continue weed management programmes.

- Maintain the coral trees near the beachside cottage as a cultural landscape element.

- Continue existing fire management regimes as appropriate.

- Clear away the vegetation that surround the Lighthouse tower and its security fence, to give a better degree of visibility of the tower from the general precinct. In conjunction, a Landscape Site Plan should be prepared.

- Review and implement as appropriate the recommendations of the feral animal study.

MEDIUM TERM

- Review and prepare an inventory of the important natural and cultural landscape features of the Headland and the Lighthouse precinct, which must be protected into the longer term.

- Ensure that appropriate Aboriginal and historical archaeological research is undertaken before any major landscape management programmes are commenced.

- Complete landscape and vegetation surveys of the headland, assessing both the natural and cultural planting.

- Prepare a weed management and landscape regeneration plan.

- Clear a greater area of land within the Lighthouse precinct to visually link the tower and the cottages into a cohesive group and make the landscape consistent with the original purpose of the place. In conjunction with the previously prepared Landscape Site Plan.

- Rationalise the walking tracks across the top of the headland by establishing a clearer pattern, particularly to the other sites and markers that dot the ridge.

- Continue the landscape regeneration programme.

- Undertake upgraded weed management programmes on a cyclical basis.

LONG TERM

- Periodically review the weed management plan and upgrade as necessary.

5.4 Built Environment Conservation Policy Implementation

SHORT TERM

- Retain the small cottages that are located along the Pittwater beach and water’s edge and conserve by adaption to holiday accommodation.

- Upgrade the security fence to Mulhall grave whilst also maintaining suitable visible access.

MEDIUM TERM

- Building conservation programmes for the Lighthouse cottages will depend on the arrangements with the lease holders for the foreseeable future.

- Liaise with the leaseholders and implement essential building conservation programmes on the cottages. This should include restoring the interiors of the main cottages including rendered walls and joinery.

- Implement a rigorous building maintenance programme for the various buildings on the precinct and the beachside cottages.
LONG TERM

- As they become available, review the condition of the buildings and implement fabric conservation programmes.

- Determine the degree of future reconstruction or adaptation of internal finishes for the cottages given that their long term use will almost certainly continue as holiday accommodation.

- Ensure that a rigorous long term maintenance plan is implemented for all buildings.

- Repair or replace deteriorated elements of building fabric, generally by replacing like with like.

5.5 Historical Archaeology Policy Implementation

SHORT TERM

- Review known information regarding historical archaeological resources.

- Collect copies of relevant historical documentary material that may provide background research in future archaeological assessments.

- Undertake an historical archaeological and engineering investigation to identify a sensitive and appropriate approach to upgrading the sandstone flagged access roadway.

MEDIUM TERM

- Formulate an archaeological zoning plan for the Headland, taking particular note of the quarries, access roads and tracks leading up from the beach and the area known as the customs station.

- Undertake additional archaeological assessments of areas with known potential, particularly if development or infrastructure proposals are under consideration.

- Upgrade the access roadway, in accordance with conservation advice, to make it more suitable as a pedestrian accessway, with very limited 4WD access. In the reconstruction process the selection of material is important. It is preferred to keep the existing nature of the track access.

LONG TERM

- Ensure that any archaeological management activities are undertaken in accordance with the NSW Heritage Act and Service policies.

5.6 Lighthouse Precinct Conservation Policy Implementation

SHORT TERM

- Continue current programmes of site management

- Complete the upgrading programme for the tracks and pathways.

- Ensure that the access roadway remains suitable for a mix of pedestrian traffic and 4WD access to the Lighthouse precinct, within the protection of its significance as an historical archaeological element.

- Ensure that existing levels of supervision and security are maintained

- Maintain rigorous rubbish management programmes.

MEDIUM TERM

- Continue to upgrade headland walking tracks, after their pattern has been rationalised.

- Develop and implement a plan to unify the Lighthouse precinct as a cohesive group of functional buildings. This should be in a low key manner and reflect the recommendations of the site specific interpretation plan.

- Continue to restrict vehicle traffic to the summit to NPWS vehicles. A porterage service could operate to and from the headland cottages for the accommodation visitors upon their initial arrival and at the end of their stay. This could be run by NPWS or its agent.

- Investigate and possibly upgrade the existing sewerage system used by the cottages.
• Investigate and provide ecologically sensitive toilet systems to cater for visitors to the Lighthouse precinct.

• Progressively monitor site safety issues. Upgrade as required, after consideration of likely impact on significant characteristics.

• Review site security activities and consider the potential for maintaining security without the need for an on-site caretaker living in the Head Keeper’s cottage.

• Liaise with AMSA or NSW Waterways to ensure that the progressive introduction of new navigational technologies into the overall precinct does not negatively impact on the significant characteristics.

LONG TERM

• Reconstruct the flagpole.

• Avoid the construction of any new buildings within the Lighthouse precinct or on the Headland.

• Consider the installation of electric power to the Lighthouse precinct.

5.7 Building Adaption Policy Implementation

SHORT TERM

• Maintain current caretaker accommodation at the base of the walking track.

MEDIUM TERM

• At the time when the cottages become available, conduct a detailed feasibility study and impact assessment to refine the re-use of the Head Keeper’s cottage in a manner which would support accommodation re-use, interpretation programmes and potential cultural tourism activities.

• The examination should include adapting the cottage to provide the range of interpretive, retail, food services, management support that is emerging as a successful direction for a number of the other NPWS Lighthouses.

• Refine the adaption proposals for the Assistants’ cottages to become short stay holiday accommodation.

• Upgrade the cottages along the Pittwater beach as holiday accommodation, possibly using a similar model as that adopted by Cape Byron.

• Review the findings and recommendations of the study with the full range of stakeholders.

• Prepare RFIs, submit and gain approval for any new identified direction.

LONG TERM

• Ensure that any future building adaption programmes respect the architectural nature and spatial arrangements of the particular building.

• Ensure that any future programmes of re-use are undertaken in accordance with the recommendations of the site specific Interpretation Plan.

5.8 Interpretation Planning Implementation

SHORT TERM

• Consolidate relevant historical documentary and other material.

• Identify any likely subjects for oral history capture, from both the Aboriginal community and those who were part of the operational phase.

• Commission and implement a site specific Interpretation Plan, to be prepared within the framework of the NPWS Lighthouses Collective Resource Interpretation Plan.

• Determine and implement a preliminary interpretive signage programme which will not conflict with the full range of recommendations of the site specific Interpretation Plan.

MEDIUM TERM

• Implement the recommendations of the
site specific Interpretation Plan.

- Implement oral history programmes.
- Implement image capture programmes.
- In accordance with the Interpretation Plan, supplement interpretive signage within the precinct.
- Develop and install interpretive signage and other programmes at the NPWS West Head look-out and visitor facilities.
- Provide interpretive displays in the rooms at the base of the Lighthouse tower not otherwise used by AMSA.

LONG TERM

- Periodically review and upgrade the site specific Interpretation Plan and interpretive activities.

5.9 Cultural Tourism Policy Implementation

SHORT TERM

- Continue the Discovery Ranger and other community support programmes for periods of peak visitation.
- Consolidate background information on visitor patterns and tourism opportunities for the Headland.

MEDIUM TERM

- Prepare a site specific tourism plan.

- As part of the precinct Landscape Site Plan include provisions for self guided walking tours, such as water and toilet facilities.

- Upgrade the presence of NPWS interpretive staff on site for periods of high visitor numbers on site.

- Investigate the adaptation of the beach front cottage at the base of the Lighthouse track, for visitor facilities, possibly in conjunction with its current use. In particular the provision of cool drinks and possibly public toilets should be included.

- Establish regular Lighthouse information and familiarisation programmes for the people who staff any local Tourist Information outlets.

- Liaise with Pittwater Council regarding the continuation of reasonable parking for the people who use the Lighthouse.

- Liaise with Pittwater Council and ensure the erection of information and welcoming signage for the Lighthouse at key points in the connecting land spit.

- Periodically review and amend any operator licences for the organised recreational activities that may take place on the Headland.

- Periodically review and amend operator licences for the organised recreational activities that may take place on the Headland.

LONG TERM

- Monitor cultural tourism programmes.
- There should be no cafes in the first seven years.
Supplementary Information

Cape Baily Lighthouse
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1.0
Introduction

1.1
Relationship to main Conservation Management and Cultural Tourism Plan

This Supplementary Information on the Cape Baily Lighthouse supports the NPWS Lighthouses Conservation Management and Cultural Plan. It provides site specific Building and Site Description Overview, with information and analysis to assist the relevant NPWS managers translate the findings and recommendations of the main Plan into the site specific issues.

There has been no separate Conservation Management Plan or Heritage Analysis prepared for the Cape Baily Lighthouse prior to this Plan. Accordingly additional research and site inspections have been undertaken for the preparation of this report.

The information on Aboriginal heritage and its significance to Aboriginal people, is based on the research and discussions undertaken by Mary Dallas during the preparation of the main Plan.
2.0
Understanding the Resource

2.1
Historical Background

ABORIGINAL MYTHOLOGY

The area is known to be occupied by the Dharawal tribal language groups. The mythological associations of the area are likely to be numerous with middens, open and sheltered camp sites and burials all located on the Kurnell Peninsula and adjacent coast.

In his Journals, James Cook wrote of the natives seen on the shores of Botany Bay. Cook and Banks observed their huts and bark canoes, fishing equipment and scarred trees. The first contact between Cook’s party and the local Aboriginal groups ended with one member of the Aboriginal community being wounded by gunshot. The site is therefore the symbolic meeting place of cultures.

EUROPEAN ARRIVAL & EARLY SETTLEMENT

In April 1770 James Cook arrived in a Bay and eventually went ashore. Cook’s first name for the Bay was “Stingray” Bay which was soon changed to “Botanists” Bay and eventually became Botany Bay. Cook and his crew including a young botanist, Joseph Banks, and naturalist Daniel Solander spent six days at Kurnell charting the bay and the surrounds and collecting natural history specimens. The seaman, Forby Sutherland died and was buried ashore. It is not surprising that the number of elements and features of the area were named after members of the crew. Cook also named Bare Island after Banks had landed on the Island to search for shells.

The expedition’s favourable reports on the area influenced the British government to establish a penal colony at Botany Bay.

Captain Arthur Phillip and the First Fleet reached Botany Bay in January 1788 and anchored in lee of Bare Island. After further exploration further north, it was decided to move the fleet to Port Jackson, considered to be more suitable for a settlement.

Before the First Fleet left Botany Bay a French expedition under the command of Jean-Francois de Galaup, Comte de Laperouse, arrived in Botany Bay. The French stayed for six weeks and built a stockade, observatory and a garden for fresh produce on the La Perouse peninsula. No evidence of these have been found.2

Kurnell, on the southern side of the Bay, however remained physically unchanged until 1815 when the first land grant of 700 acres was made to Captain James Birnie.3 The grant included Captain Cook’s landing place and it is assumed also included Cape Baily.

Birnie called his grant “Alpha Farm” (alpha being Greek for first) where he planned to start a whaling station. He constructed a cottage on a rise overlooking the Bay, cleared a portion of his grant and cut a channel through the rocks below to allow his boats to land. The whaling venture however failed and Birnie subsequently sold the land to John Connell in 1828. The name “Connell” may be associated with the naming of Kurnell and Cronulla. One theory is that the word “Kurnell” is an Aboriginal corruption of “Connell”.

The area now called Sutherland Shire was officially founded by Government Proclamation in 1835. It was formerly known as “the land south of the Georges River”, “the Port Acking district” and finally the “Port Hacking district”. Governor Macquarie had commenced the survey of the whole colony in 1817, however the process took longer than anticipated owing to the lack of skilled surveyors. By 1830 eighteen counties had been surveyed. It was not until 1835 that the parish of “Southerland” came about, possibly named after Forby Sutherland, the Endeavour sailor who died and was buried at Kurnell in 1770.

Connell cleared a considerable amount of land for grazing and a dairy farm which he ran until 1860 when he sold the land to Thomas Holt. The original cottage fell into disuse during the 1860s and vandals caused continued damage until the 1880s when it was finally demolished. A timber house, which still survives, was constructed in 1902 on the original cottage

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1Hutton Neve, M. The Early Days of Kurnell to Cronulla, 1983, p 9
2NPWS, Botany Bay National Park Plan of Management, Date Unknown
4ibid.
6ibid., pp.6-7
site. In 1899 Holt donated 250 acres of his land to the Crown for the formation of a reserve. Known as Captain Cook’s Landing Place, the original reserve was managed by a trust, the “Captain Cook’s Landing Place Trust”. The Reserve included the landing place and the extreme headland, together with adjoining Crown land, but through an oversight was not officially gazetted until 1902.7 The park is now referred to as Botany Bay National Park.

Until the railway linked Sydney with the Illawarra in the 1880s the only means of transport to and from the south coast was by sea. The first shipwreck recorded in the area was the cutter INDUSTRY, lost off “Port Ackin” (sic.) in late 1842.8 The barque ADELPHI en route from Adelaide to Newcastle was wrecked on a reef off Port Hacking in late 1879. The crews of both of these fortunately survived.

The worst wreck was the Bulli Coal Co’s collier WONIORA, which was wrecked just north east of Cape Baily in 1882. Only one survived of the twenty man crew. This was followed by INVINCIBLE in 1889, the HILDA, wrecked at Cape Baily in 1893 and the little coaster KOONTA in 1898.9

By this time NSW had already embarked on a programme of coastal and river lighting and was to maintain it mainly because of Captain Francis Hixson’s commitment to maritime safety. The incidence of more wrecks along the NSW coast resulted in a burst of lighthouse construction in the late nineteenth century.

DEVELOPMENT OF THE LHIGHTHOUSE

It seems that the issue of a light at Cape Baily was not raised until the 1930s. The interwar years had seen a general decline in expenditure on navigational aids in NSW. A large works programme was undertaken during the years 1913-20 due to the Inspection reports which began in 1911, however this programme primarily extended to existing lights. The revenue generation of “user pays” had been abandoned, a situation which generally continued until the 1960s.

A number of other administrative changes occurred and finally resulted in the formation of the Lighthouse Advisory Committee. At its first meeting in Melbourne on 1st September 1931, the Committee was asked to consider whether it was necessary to provide lights at five points around the country including Cape Baily (NSW). These lights, three in Queensland, one in NSW and one in Western Australia, had been selected on the basis of being the most urgently required and could be constructed without much cost.10

After some consideration it was considered that the construction of one of the Queensland lights proceed. As for the others, including Cape Baily, the committee agreed that although they were desirable from a shipping point of view, however the necessity did not warrant the expenditure at that time.

It seems that the Committee persisted with cost cutting measures throughout the 1930s, a period when a number of the Lighthouses were automated. Finally it was with the threat of war closer to home, that the Committee agreed to the largest works program since the period of 1913-20. This included the erection of automatic lights at a number of locations, including Cape Baily (NSW).11

The onset of the war however meant that the approval did not take immediate effect. Throughout the war, Lighthouses were actually extinguished and relit only as the Navy required.

Like most Commonwealth agencies during the war and post war periods, the Lighthouse Service suffered serious shortages of money, equipment and staff. For some years the Lighthouse Service had to “make do” and activities were largely restricted to maintaining existing lights and quarters.

In January 1943 the Commonwealth Lighthouse Service was transferred to the Department of Supply and Shipping where it remained until 1948. It was then placed in the Department of Shipping and Fuel, which changed to the Department of Fuel, Shipping and Transport in 1950. In May 1951, with the passing of the post war fuel shortage the name simply became the Department of Shipping and Transport.12

A Specification dated February 1950, by the Department of Works and Housing for the
Department of Shipping and Fuel, outlined the works for the construction of a Lighthouse at Cape Baily, NSW. The work to be done was described as erection and completion of a “lighthouse tower 20 feet high at Cape Baily near Kurnell, Sydney, having concrete walls and floors and surrounded by concrete apron”. The planting of grass was to be carried out around the apron and the “supply and installation of the lantern not part of this contract”.

The Specification notes that a grass “berm” was to cover the ground around the tower. The “area to be planted with tufts of Marram grass spaced at two feet centres”. An additional clause states that it is “important that natural vegetation be disturbed as little as possible as the site is very exposed and subject to erosion”.

There is little information on the lantern in the Specification, only that the installation was not part of the contract. It is assumed that the lantern house was “recycled”, being of a late 19th century style and type. It would also make sense given the post war shortages of funds and equipment, however the details of its transfer and former location are unknown. The drawings dated September 1949 only notes that bronze fixing bolts were to be supplied to and placed in position by the Contractor.

The drawings (see attached) detail the concrete framing of the structure and other features such as the external bronze handrailings at the gallery level. Internally the plan shows the depressions for the acetylene cylinders. A removable ladder from ground level extends to a ladder which is fixed to the half way up the interior and access the lantern level. A note states that the lightning conductors to be supplied by the Lighthouse Services.

The plans were amended in the early 1950s, the contract let and the tower constructed during 1950-51. No quarters or any other structures were constructed.

In 1967 the reserve came under the management of the NPWS as part of Botany Bay National Park which was gazetted in 1988. The Tower is now leased back to AMSA as an operating navigational aid. Access to the tower, vandalism and the fragile ecosystem of the peninsula place high impacts on the landscape.

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13 Australian Archives (Sydney), SP 155/1 MISC 219941, 1950
14 Australian Archives (Sydney), SP 155/1 MISC 219941, 1949
Australian Archives (Brisbane), A10182/2 CN10062 CN35028, 1930
2.2
Description of the Setting

THE COASTAL EDGE

Cape Baily is located to the east of Botany Bay and is part of the Botany Bay National Park. To the north Cape Banks is a prominent headland and forms the northern point at the entrance to Botany Bay.

The Kurnell Peninsula forms the southern land mass at the entrance to Botany Bay and curves around to the south into Bate Bay and Cronulla Beach. Cape Baily Lighthouse is located within the Botany Bay National Park, located in the south eastern coastal zone of the Kurnell Peninsula.

The Cronulla Beach strip spans along the narrowest section of the peninsula which features a number of eastern points including Sutherland Point, Inscription Point, Cape Solander, Point Long Nose, Cape Baily, Potter Point, Merries Reef and Doughboy Head along its dramatic and high coastal cliffs. The vegetation along its cliffs is largely coastal heathland and shows evidence of the strong winds that sweep the peninsula.

Behind the heathland lies some of the most valuable habitat on the peninsula, with high wetland and swamps abounding with unique and endangered wildlife, which is protected from high fire frequency.

Weed infestation varies depending on the exposure to settlement patterns, particularly to the sandy vehicular tracks that link the area.

South of Bate Bay, Port Hacking forms the north eastern point of the Royal National Park which extends further south along the coastline.

Extensive views are gained from the elevated topography around the headland, looking west across Botany Bay to Hurstville and north west to Sydney Airport and the Sydney CBD. The Headland is located below the main southern approach flight path to the airport.
THE HEADLAND

The Kurnell Peninsula forms essentially features two distinct zones, the industrial zone characterised by the oil refinery and associated industries and settlement patterns and the essentially natural zone of the Botany Bay National Park. Located not far inland and adjacent to the National Park is the Kurnell Oil Refinery, a large industrial installation that is visually prominent from the headland surrounding the lighthouse. It is audible and on some days sends a pungent smell across the area. The nearby Cronulla Sewerage Treatment Works adds to the pollution. The refinery is adjoined by a large industrial area which spreads across the western section of the headland peninsula.

The Botany Bay National Park occupies the eastern section of the headland. It features Captain Cook's Landing Place Historic Site, the meeting place of cultures, in addition to a number of smaller memorials, monuments and lookouts. The Cape Baily Lighthouse is located in the south eastern section of the headland. Further south the Potter Point area of the peninsula is managed by Sydney Water and is where the south west sewerage outfall pipeline is constructed.

The road access along the pipeline, into the vicinity of the lighthouse, traverses the National Park in a southwards direction. An unsealed coastal parking area with views towards Cronulla and the Royal National Park is the starting point for an easy walk around the coast to the lighthouse (approximately 1 kilometre). The alternative walking access is around the northern side of the peninsular, the longer of the two walks.

Heath vegetation covers the headland and is the habitat of a range of birds and insects, notable honeyeaters and seabirds such as shearwaters and albatross.
ABORIGINAL RESOURCES

Numerous middens, open and sheltered camp sites and burials are located on the Kurnell peninsula and the adjacent coast. Twelve middens and open camp sites appear on the NPWS Register for the area. Sample archaeological surveys and small area surveys have identified many sites but none in the immediate area of the lighthouse. The area is of substantial significance to the Aboriginal people.

THE LIGHTHOUSE PRECINCT

The lighthouse sits on a rise and is surrounded by coastal scrub and wetlands. The clearing around the tower is approximately fifteen metres square however from a distance it appears that the tower is growing out of the scrub and it is difficult to gauge its height.

The sitting on the rise, several hundred metres behind the coastal cliffs, means that the white painted lighthouse is visible from quite a distance.

The precinct demonstrates some evidence of fencing, constructed of copper impregnated pine logs and fencing wire. These are generally in poor condition and are missing in many places. The site has been heavily vandalised due to easy access and the fragility of the landscape.

The base of the tower offers some excellent views across the heath land towards Hurstville and the Blue Mountains to the west, the City to the north west and Cronulla to the south.

The Solander Trig is visible north west of the lighthouse. At sixty seven metres above sea level it is the highest point on the peninsula. This was also the site of military activity during the Second World War and the ruins of the concrete bunkers can apparently still be found in the locality.

AMSA requires access to the site for essential maintenance. However, the lighthouse precinct is extremely vulnerable to erosion from vehicular traffic and an environmentally acceptable means of access will need to be negotiated between AMSA and NPWS.
CAPE BAILY LIGHTHOUSE
BEACON OF LIGHT ZONE, 1998
Not to Scale
Graham Brooks & Associates Pty. Ltd.
CAPE BAILY LIGHTHOUSE
FLOOR PLANS
(Source: Australian Archives, SP155/1 MISC21994L)
Not to Scale
Graham Brooks & Associates Pty. Ltd.
2.3 The Constructed Image

Cape Baily is the only NPWS Lighthouse that does not have any cottages or associated structures. Constructed in the 1950s, automation had long made construction of Keeper’s accommodation unnecessary.

THE LIGHTHOUSE TOWER

The square concrete tower sits on a concrete slab about 9.5 metres square, generally at ground level except on the southern side where erosion has lowered the adjacent ground level by about 200mm. There is some evidence of damage to the ground mounted extension of the copper lightning conductor rod and of a former handrail, which has long since been removed.

The lighthouse consists of two primary components, the rectangular in-situ concrete tower, about three metres square and approximately nine metres high and erected in the 1950s; and a prefabricated metal lantern house, with conical capping, which appears to be a 19th century construction. The lamp is fully electrified and automated, powered by solar cells. The solar panels are fixed at various locations to the handrails of the platform around the lantern house. Conical capping was an unusual feature for the metal lantern houses as they were usually fitted with a hemi-spherical top to improve ventilation for the light source.

The external metalwork including the balcony handrail and lantern house has generally deteriorated. Vandals have also left their mark on the single entry door at the tower’s base.

Internally the ground floor level features an open, high space featuring an internal ladder that accesses the upper gallery level.
2.4
Significance

The Cape Baily Lighthouse is unique within the NPWS collection as the only mid 20th century lighthouse structure, which was erected originally as an automatic light and was therefore without supporting cottages of other structures.

In this regard it fits into a pattern of mid 20th century lighthouses erected along the NSW coastline, some of which, such as that at Clarence River, replaced earlier lighthouse structures.

HISTORIC SIGNIFICANCE

Botany Bay is of symbolic importance as the first landing of the British expedition of James Cook in 1770 and the significance of the setting relates to the association with European exploration and settlement and the history of contact between indigenous Australians and Europeans.

The Cape Baily lighthouse is significant being related to the post World War development of Botany Bay as the major shipping port for Sydney.

AESTHETIC SIGNIFICANCE

The scenic landscape which has been retained with its various ecosystems, vegetation and habitats. The native vegetation in the area is remnant of the coastal vegetation which once covered the coastline from Sydney Harbour to Port Hacking.

The tower is unusual as it features a late 19th century lantern house enclosure erected on the 1950 concrete base. The undorned square concrete tower is expressive of functionalist approach to the architectural design.

SCIENTIFIC SIGNIFICANCE

Botany Bay is the setting of the first contact of the British explorers with native plants and animals. Joseph Banks and Daniel Solander made the first scientific collections from this area.

SOCIAL SIGNIFICANCE

The Cape Baily Lighthouse has no identifiable social significance to any particular group of people. It provides a necessary navigation function for mariners approaching Botany Bay, but its isolated coastal location and automated operation have meant that no group have a particularly strong association with the building.

SIGNIFICANCE TO ABORIGINAL PEOPLE

The significance of this site for the local Aboriginal community relates to the land and not the lighthouse itself.

ELEMENTS OF PRIMARY AND CONTRIBUTORY SIGNIFICANCE

Grading the comparative significance of various elements or characteristics of an historic place or building is a useful management approach to support future programmes of detailed fabric or artefact conservation.

The conclusions reached by the consultant team preparing this overall Conservation Management Plan have taken a different emphasis.

The characteristic considered to be the most important in relation to the NPWS Lighthouses is the manner in which they have evolved progressively while retaining their essential integrity and significant features. Accordingly a three tier significance rating has been adopted.

- Characteristics of Primary Significance
- Characteristics of Contributory Significance
- Characteristics of Little or No Significance.

Primary Significance:

All those elements and features that relate to the initial construction and operation of the particular Lighthouse and its supporting buildings and infrastructure. It includes the pre-existing topographical and landscape characteristics, initial cultural landscape features and sites of Aboriginal cultural significance.
Contributory Significance:

All those elements which relate to the subsequent use and development of the place as an operational Lighthouse, right down to the period when they were transferred to NPWS. It includes subsequent natural and cultural landscape features and post contact period sites and places of Aboriginal cultural significance.

Elements Of Little Or No Significance:

Generally only those items which relate to the subsequent re-use and development of the place after it was transferred to NPWS.
3.0 Constraints & Opportunities

This section confirms the listing status by various heritage agencies for the Cape Baily Lighthouse and summarises the views of relevant community members or representatives.

Refer to the main Plan for guidance with regard to the appropriate responsibilities and actions to be taken in relation to these listings and viewpoints.

3.1 Heritage Recognition & Listing Status

NATIONAL AGENCIES

Cape Baily is listed on the Register of the National Estate, administered by the Australian Heritage Commission as part of the Botany Bay national Park. The “Botany Bay Entrance, La Perouse NSW” is listed as an indicative place. The indicative listing incorporates sections of the La Perouse and Kurnell Peninsulas. It includes and notes Cape Baily Lighthouse.

AMSA retains operational use of the tower, under the terms of the Heads of Agreement.

STATE AGENCIES

The primary conservation and management framework for the Lighthouse is the NSW National Parks and Wildlife Act. The site of the Lighthouse complex is not currently gazetted within the Botany Bay National Park, but should be added to it. The Park is managed under the Botany Bay National Park Plan of Management. This will need to be amended in accordance with the recommendations of this Plan.

REP No 17 Kurnell Peninsula, recognises the National Park and Nature Reserve, however does not individually refer to Cape Baily Lighthouse.

Botany Bay National Park and Kurnell Historic Site are listed on the State Heritage Register.

The Cape Baily Lighthouse is not individually listed on the State Heritage Register however its inclusion within the Botany Bay National Park implies that it is covered within the general heritage management principles and procedures for all items included in the State Heritage Register.

Cape Baily Lighthouse is listed, as an item of regional significance, within the NPWS s170 Heritage and Conservation Register, under the NSW Heritage Act and Heritage Amendment Bill 1998.

Cape Baily Lighthouse is not listed in the State Heritage Register.

LOCAL GOVERNMENT

Cape Baily is not individually listed as an item in the Sutherland Shire Council, Heritage LEP (Amendment No.13) 1995. However Botany Bay National Park is a listed item in the LEP, indicating that Cape Baily Lighthouse falls under the heritage management provisions of the LEP.

NATIONAL TRUST OF AUSTRALIA (NSW)

Cape Baily Lighthouse has not been classified by the National Trust. The Botany Bay Entrance Landscape Conservation Area comprising of land to north of Cape Baily has been classified by the National Trust of Australia (NSW).

ABORIGINAL COMMUNITY

There are a number of Aboriginal communities associated with the Kurnell peninsula and Cape Baily area.

Two Native Title claims have been made in the area by representatives on behalf of the Dharawal people.

Consultation with the Aboriginal community is presently informal and this relationship is appreciated by the Aboriginal community. Consultation includes meetings and concerns matters relating to site management and Aboriginal community activities. NPWS has been meeting with local Aboriginal communities for 18 months or so to discuss management of the Botany Bay National Park and mechanisms for a greater level of community involvement. A MOU is only one of several mechanisms that is being considered.

The Aboriginal communities have expressed a desire for participating in the management of
the Park concerning land management, site protection, cultural tourism and community access.

Future interest in guided tours, including bush tucker and history tours is expected.

LOCAL COMMUNITY

The Lighthouse and surrounding area are recognised by the local surfing and fishing communities who frequent the area.

Potter Point Conservation Committee, with Sutherland Shire Council, local industry and residents are other interested parties who have expressed concerned about the environmental management of the area.

The Potter Point Working Group includes representatives of Surf Rider Association, Sydney Water, NPWS, community representatives and Sutherland Council. It assists in the overall management of the area.

TOURISM OPERATORS

Currently self guided tours of the Peninsula with maps and information available at the Kurnell Discovery Centre. There are no guided tours to the Lighthouse.
3.2 Conserving the Cultural Resources

THE CONDITION OF THE BUILDING

The building is in a fair condition. There is evidence of some damage to the ground mounted extension of the copper lightning conductor rod and of a former handrail, which has long since been removed.

The precinct demonstrates some evidence of fencing, constructed of copper impregnated pine logs and fencing wire which are generally in poor condition and are missing in many places.

CULTURAL & NATURAL LANDSCAPES

The coastal edge zone features a balance of natural and developed areas, with a greater density of development occurring further away from the coastal edge.

The headlands areas of Kurnell and La Perouse also feature two distinct zones of natural and developed areas which feature the cultural aspects within. These two headlands feature essentially natural zone and park areas on the eastern, coastal strip and are flanked by development to the west and in this case surrounding the remainder of the Bay with the waterfront occupied by industry, residential and commercial development.

The Kurnell Headland as mentioned features the Oil refinery which tends to dominate the scene. The natural coastal zone of the National Park extends around the curve of the peninsula and includes the various cultural aspects within which are connected by a series of walks and paths.

The Lighthouse, at the south eastern section of the Park is set away from the main attractions and monuments located at north of the Precinct.

Portions of the coastal precincts within the headland suffer severe wind erosion making it difficult to achieve adequate revegetation. Some walking tracks are in poor condition, while there is a major problem with the dumping of rubbish along the access roadway across to the southern coastline of the headland.

ABORIGINAL CULTURAL RESOURCES

Twelve middens and open camp sites appear on the NPWS Register for the area around the Lighthouse - Doughboy Head, Potter Point, Boat Harbour (2-3-0218; 0371; 0687; 0688; 0697 and 0704-0710).

It seems that most of the Aboriginal occupation ceased in the Kurnell area from about the 1880s possibly as a combined result of disease, attacks by colonists and colonial policy of removal of Aboriginal people in the area.

Although many Aboriginal sites have been destroyed, potential sites include additional middens and camp sites. More comprehensive survey of the area is required, with potential interpretive and research themes being pre-historical occupation, land and sea use, bush tucker, local archaeology and cultural interpretation of use.

HISTORICAL ARCHAEOLOGICAL RESOURCES

The area has potential to yield information related to the initial construction of the lighthouse and subsequent development.

Historical references related to the settlement, growth and development of the outlying area will provide additional interest. Elements related to the early grants and development of the Peninsula prior to the dedication of the Park lands.

NAVIGATIONAL AIDS

The Lighthouse operates as a navigational aid and is part of a lease back arrangement between NPWS and AMSA. Access into the tower is covered by the Heads of Agreement between AMSA and the State of NSW. AMSA maintain rights of access to the Tower, through the National Park.

The AMSA lease provides a framework within which access rights are subject to negotiations between AMSA and NPWS, due to the fragility of the site and high erodability of the landscape.
3.3
Other Management Issues

PRECINCT & SITE MANAGEMENT

Until fairly recently the Kurnell area was managed from the La Perouse section of the Park. It is likely that there may be documentary records of the lighthouse held in the La Perouse NPWS office.

Sutherland Council has been encouraged by NPWS to form the Potter Point Working Group, including the Surf Riders Association, Sydney Water, NPWS and Council, to assist in the management of the peninsula.

There is some aerial spraying in progress to control bitou bush weed growth and NPWS implements a constant programme of cleaning up dumped rubbish and dumped vehicles. A gate on the approach road has been installed in order to reduced the incidence of rubbish dumping.

Dune erosion resulting from vehicular traffic is the biggest ecological management problem.

Botany Bay National Park, in recognition of the symbolic meeting place of cultures, recognises Aboriginal heritage and culture as essential for the future understanding of Botany Bay and Kurnell in Australian history, and its future as a cosmopolitan nation.

Aboriginal people are being consulted towards reconciliation and management partnerships.

Any consideration for this site at Cape Baily will require patience and input from traditional indigenous people.

The Dharawal language for the Bay is Kaway, and all reference to the general Aboriginal people of the Bay is Kamayagal. NPWS is committed to the use of this terminology in BBNP communication in recognition of thus culture.

BUILDING CONSERVATION & RE-USE ISSUES

Building conservation issues are primarily related to the deterioration of external metalwork, including on the balcony railing and the lantern house, vandalism to the entry door and the need to repaint the concrete tower at regular intervals.

The main building conservation activity appears to be the regular application of white paint to the external walls and some minor repairs to the entry door locks.

The lighthouse is still an operating navigational aid.

Within the ground floor level of the lighthouse there is a space about 3m square, which although not currently permitted by the AMSA agreement, could present potential for limited display. There is a single door into the tower, on the western face. Access to the upper level is by internal ladder.

There is a walking platform at the upper level, well protected by a handrail. However, since the tower platform is only about 8m high, the attraction of the raised viewing location is minimal.

There are no associated buildings or other structures related to the lighthouse, that could offer any re-use potential.

TOURISM MANAGEMENT ISSUES

The most popular recreational activities in this section of the Kurnell Peninsular are coastal walking, horse riding, surfing, diving and rock fishing. The lighthouse is effectively not part of the tourism promotion activities of the area. There is no signage to the Lighthouse from either of the two potential starting points for walking tracks.

The white painted lighthouse is visible from quite a distance along the approaching walking tracks and is definitely an interesting feature. There is scope to interpret the lighthouse as part of Sydney port developments and NPWS collection, and its continuity of the original techniques. It remains as effectively the only 20th century lighthouse in the NPWS collection. The lighthouse retains its operational navigational aid function, an important interpretative aspect.

Views from the base of the tower are excellent, across heath land towards the Blue Mountains to the west, the City to the north west and Cronulla to the south. This aspect, as a viewing place may be promoted.

Cape Solander is becoming increasingly popular as a whale watching location and special tours are now organised from the Discovery Centre in Botany Bay National Park.
The Discovery Centre at Kurnell is a popular point of enquiry for visitors to the area. Visitor numbers recorded at the Discovery Centre through 1997 indicated about 3500 per month, excluding school groups.

The lighthouse sits adjacent to the coastal walking track which extends from Kurnell and Cooks Landing Site, around the peninsular, across the beaches at Cronulla, to Bundeena by ferry and through the Royal National Park to the Illawarra coast. This is a regional recreational resource which warrants further promotion.

The main tourism role for this lighthouse is as a focus for a coastal walk or whale watching tour. It simply becomes the point at which the walking tour from the north or south returns to the starting point.

There is scope to interpret the lighthouse within the BBNP Discovery Centre. It reflects the changing face of the area and contributes to the opening of Botany Bay as a major shipping terminal in the decades after World War Two. Port Botany has now replaced Sydney Harbour as the major port operations for Sydney.

RECENT ACTIVITIES

Draft Plan of Management for Botany Bay National Park has recently been published for comment. It contains no reference to the lighthouse or any recognition that it fits within the cultural or tourism resources of the Park.

CURRENT OR MID TERM PROPOSALS

There are no known current or mid term NPWS proposals in relation to the Lighthouse that are awaiting the outcomes of this study.

Sutherland Council is starting to look at the whole of the Kurnell Peninsula as one planning unit, a move which could generate long term management improvements.

Council is also attempting to improve tourism management on the peninsula. Ref Margo Lagos at Council.

NPWS will re-establish Dharrawal language reference in common usage jointly with these recent European names over time and in consultation with Aboriginal people.
4.0 Primary Conservation Policies for the Cape Baily Lighthouse

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part D of the Conservation Management and Cultural Tourism Plan, the following primary policies establish the essential conservation framework for the Cape Baily Lighthouse.

- The Cape Baily Lighthouse shall be managed by NPWS as a key contributing component of the overall NPWS Lighthouse Collection.

- The Conservation Policies and Implementation Guidelines contained in the overall Conservation Management and Cultural Tourism Plan shall be applied, as appropriate, to the Cape Baily Lighthouse.

- NPWS shall gazette the Lighthouse site as part of the adjoining Botany Bay National Park, in recognition of its complex cultural and natural significance.

- NPWS shall conserve and manage the lighthouse as an historic building that clearly express its original functional role and which has gradually evolved since initial construction in response to progressively developed coastal navigation technology. Recognition and respect for the evolving development of the lighthouse from 1951 shall form the basis for conservation and management of the building, technology, artefacts, and infrastructure. Refer to Section 17.1 of the main CM&CTP for the Conservation Principles related to fabric, features and associated artefacts of differing significance.

- Conservation of the Cape Baily Lighthouse shall protect, respect and where appropriate enhance the identified and closely interrelated characteristics of cultural and natural significance of the place, in its own right and as a component of a larger state, national and international network of late 19th and early 20th century lighthouses.

- All essential and outstanding catch-up repair and conservation works to the building and site elements shall be undertaken within a period of one year.

- The building and site elements shall be conserved by the implementation and continuation of a long term rigorous, cyclical and appropriate maintenance regime, starting immediately.

- NPWS shall conserve and manage the immediate site and setting as a modified natural landscape with important cultural landscape characteristics that clearly illustrate the development and occupation of the precinct as an operational lighthouse complex, from 1951.

- NPWS shall conserve and manage the Aboriginal heritage characteristics of the Headland in consultation with the relevant representatives of the local Aboriginal communities.

- NPWS shall conserve and manage the building and its setting in a manner which communicates and interprets the multi-layered nature of its cultural and natural significance to the general public.

- NPWS shall facilitate the on-going operation of the lighthouse tower by AMSA as an operational navigation aid, within the framework of the Heads of Agreement between AMSA and the State of NSW.

- NPWS shall conserve and manage the building in its current form with only internal adaption.

- There shall be no new permanent buildings erected within the immediate Lighthouse precinct. The design and positioning of any future navigational equipment or energy source infrastructure shall be carefully considered to avoid or minimise any adverse impact on the heritage or visual characteristics of the overall lighthouse precinct and the headland generally.

- NPWS shall confine visitors access to the Lighthouse precinct to pedestrians.

- NPWS shall conserve and manage the Cape Baily Lighthouse in full recognition of the heritage and environmental management provisions of the relevant aims, objectives, standards and procedures.
of the Australian Heritage Commission, NSW Heritage Council, NSW EP&A Act, Regional and Local Environmental Plans, the National Trust of Australia (NSW), NPWS and good conservation practice as promoted by Australia ICOMOS.

- NPWS shall co-ordinate the marketing and promotion of interpretation and cultural tourism activities at the Cape Baily Lighthouse, with the overall NPWS Lighthouses collective resource by reference to the Lighthouses Marketing and Promotions Unit within the Community Relations Division.
5.0
Site Specific
Conservation Policy
Implementation

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part E of the Conservation Management and Cultural Tourism Plan, the following guidelines establish the implementation framework for the Cape Baily Lighthouse.

The Conservation Policy Implementation recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

These site specific recommendations are framed in the same categories as the Conservation Policies and Implementation Guidelines of the main Plan, for ease of cross reference.

5.1
Reference to Main CM&CT Plan

SHORT TERM

- Refer to the Conservation Policy and Implementation Sections of the main NPWS Lighthouses Conservation Management and Cultural Tourism Plan. All of the following policies and implementation recommendations should be read in association with the larger policy framework.

- Participate in the Service wide review and assessment of the CM&CTP.

MEDIUM TERM

- Give special regard to the NPWS management recommendations and other general policies contained in the CM&CTP. In this regard, ensure that close liaison is maintained with all relevant stakeholders, particularly those concerned with heritage management and tourism operations.

- Manage the site in accordance with general NPWS management policies and guidelines.

- Review and update the Botany Bay National Park Plan of Management in accordance with the findings and recommendations of the final CM&CTP.

- Facilitate the co-ordination of the Cape Baily Lighthouse conservation management and cultural tourism activities with the remainder of the NPWS collective resource. In particular contribute experiences and lessons to the other Lighthouse managers through the Lighthouse Reference Committee.

The following recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

5.2
Aboriginal Heritage Conservation Policy Implementation

SHORT TERM

- Review the findings of recent Aboriginal site surveys and the previously collected knowledge.

- Support the current consultation processes with representatives of the Aboriginal community.

Work with the Dharawal people to prepare plans for further site surveys, interpretation and to enhance the overall understanding of the Aboriginal culture.

MEDIUM TERM

- Continue active consultation with the Aboriginal community to expand the understanding of their cultural heritage and involvement with the management and cultural tourism programmes in BBNP including the lighthouse.

- Undertake additional research and site surveys to expand the knowledge of Aboriginal cultural resources.

- Maintain active liaison regarding any
Native Title issues that may relate to the Headland and the Lighthouse precinct.

LONG TERM
- Ensure the long term consolidation of earlier programmes.

5.3 Landscape Conservation Policy Implementation

SHORT TERM
- Stem and repair soil erosion at the base of the Lighthouse.
- Continue weed management programmes.
- Continue bush regeneration programmes
- Control public access.

MEDIUM TERM
- Keep the surrounding bush cover near the Lighthouse tower to a height which enables the tower to project well above and gain a clear throw of light out to sea.
- Review and prepare an inventory of the important natural and cultural landscape features of the Headland and the Lighthouse precinct, which must be protected into the longer term.
- Ensure that appropriate Aboriginal and historical archaeological research is undertaken before any major landscape management programmes are commenced.
- Complete landscape and vegetation surveys of the headland
- Continue to manage the coastal walking track to an appropriate level and quality.
- Control public access and undertake continuing erosion control measures in the larger precinct.

LONG TERM
- Periodically review the erosion, landscape and weed management plans and upgrade as necessary.

5.4 Built Environment Conservation Policy Implementation

SHORT TERM
- No work is required in the short term.

MEDIUM TERM
- Facilitate the on-going maintenance of the Lighthouse Tower by AMSA.
- Encourage AMSA to fund soil stabilisation in the immediate vicinity of the Lighthouse platform and control vandalism.

LONG TERM
- Subject to a change in responsibility from AMSA to NPWS and depending on long term management arrangements with AMSA, ensure or facilitate the implementation of a maintenance plan for the Lighthouse tower.
- Repair or replace deteriorated elements of building fabric, generally by replacing like with like.
- NPWS to liaise with the relevant stakeholders and review the most appropriate location for working navigational aids and access possibility of move to Sydney Water tank precinct.

5.5 Historical Archaeology Policy Implementation

SHORT TERM
- Review known information regarding historical archaeological resources, even though these are likely to be extremely limited in relation to the Lighthouse.
- Collect copies of relevant historical documentary material that may provide background research in future archaeological assessments.

MEDIUM TERM
- Formulate an archaeological zoning plan for the larger Headland, taking particular
note of the linkages to any WW2 military sites.

- Undertake additional archaeological assessments of areas with known potential, particularly if development or infrastructure proposals are under consideration.

**LONG TERM**

- Ensure that any archaeological management activities are undertaken in accordance with the NSW Heritage Act and Service policies.

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5.6  
**Lighthouse Precinct Conservation Policy Implementation**

**SHORT TERM**

- Continue current programmes of site management

- Ensure that existing levels of supervision and security are maintained

**MEDIUM TERM**

- Continue to restore headland walking tracks.

- Repair and reconstruct the fence lines around the Lighthouse precinct and the vicinity of the walking track.

- Monitor the number and flow of visitors vehicles into the established car parking area, particularly in peak periods.

- Progressively monitor site safety issues. Upgrade as required, after consideration of likely impact on significant characteristics.

**LONG TERM**

- Avoid the construction of any new buildings within the Lighthouse precinct or in the visual curtilage established by the coastal terrain.

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5.7  
**Building Adaption Policy Implementation**

**SHORT TERM**

- No action required in the short term.

**MEDIUM TERM**

- Consider the installation of a small interpretive display in the base of the tower, subject to agreements with AMSA.

- Review the findings and recommendations of the study with the full range of stakeholders.

- Prepare REFs, submit and gain approval for any new identified direction.

**LONG TERM**

- Ensure that any future adaption programmes respect the architectural nature and spatial arrangements of the tower.

- Ensure that any future programmes of re-use are undertaken in accordance with the recommendations of the Interpretation Plan.

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5.8  
**Interpretation Planning Implementation**

**SHORT TERM**

- Co-operate in and contribute to the implementation of the NPWS Lighthouses Collective Resource Interpretation Plan.

- Consolidate relevant historical documentary and other material.

- Identify any likely subjects for oral history capture, from both the Aboriginal community and those who were part of the operational phase.

- Determine and implement a preliminary interpretive signage programme at the Kurnell Discovery Centre.
MEDIUM TERM

• Commission and implement a site specific Interpretation Plan, to be prepared within the framework of the NPWS Lighthouses Collective Resource Interpretation Plan, for display at the Kurnell Discovery Centre.

• Implement oral history programmes.

• Implement image capture programmes.

• In accordance with the Interpretation Plan, supplement interpretive signage within the precinct.

LONG TERM

• Periodically review and upgrade the site specific Interpretation Plan and interpretive activities at the Discovery Centre.

5.9 Cultural Tourism Policy
Implementation

SHORT TERM

• Continue the Discovery Ranger and other community support programmes for periods of peak visitation.

• Consolidate background information on visitor patterns and tourism opportunities for the Headland.

MEDIUM TERM

• Prepare a specific tourism plan as part of the Kurnell Peninsula Tourism Strategy.

• Establish regular Lighthouse information and familiarisation programmes for the people who staff the Kurnell Discovery Centre.

• Incorporate the Lighthouse as a destination for walking tours which commence at the Discovery Centre.

LONG TERM

• Monitor cultural tourism programmes.
6.0
Bibliography

6.1
Documentary Sources


6.2
Illustration Sources

Australian Archives (Sydney), SP 155/1 MISC 21994L Commonwealth of Australia Department of Works & Housing Drawing Numbers NS-471, NS-472, NS-477, *Cape Baily Lighthouse, 29 September 1949*


15Attached overleaf
Part H

Supplementary Information
For Each Lighthouse
Supplementary Information

Cape Byron Lighthouse
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Introduction

1.1
Relationship to main Conservation Management and Cultural Tourism Plan

This Supplementary Information on the Cape Byron Lighthouse supports the NPWS Lighthouses Conservation Management and Cultural Plan. It provides site specific Building and Site Description Overview, with information and analysis to assist the relevant NPWS managers translate the findings and recommendations of the main Plan into the site specific issues.

This Conservation Management and Cultural Tourism Plan and this Supplementary Information supersede the Cape Byron Conservation Management Plan prepared for AMSA in 1993 and the Heritage Analyses prepared for the Cape Byron Headland Trust.

In accordance with the project brief, the information contained in Section 2 of this Supplementary Information has been drawn from the AMSA Conservation Plan but summarised and rearranged for consistency across the whole NPWS Lighthouses resource.

The information on Aboriginal heritage and its significance to Aboriginal people, is based on the research and discussions undertaken by Mary Dallas during the preparation of the main Plan.

The detailed historical background and building analysis contained in the AMSA Conservation Plan has been reproduced and is attached to this supplementary plan as reference material.
2.0 Understanding the Resource

2.1 Historical Background

ABORIGINAL MYTHOLOGY & USE

The coastal lands around Cape Byron were the tribal territories of the Bundjalung people with two recognised subgroups being the Arakwal and the Galiwal people. The current native title groups are associated with the Arakwal and the Widjabil Clan of the Badjulung Nation.

There appears to be no recorded myths specifically associated with the headland at Cape Byron, however a number stories have been associated with the creation of the Julian Rocks which are located offshore to the north west of the headland.

The headland and coastal area has long associations with the Aboriginal community, the presence of middens and camp sites shows the periodic use of the place which is important as a place where tribal fighting took place and possibly used as a ceremonial area.

EUROPEAN DISCOVERY & EARLY SETTLEMENT

The Cape was named after Captain Cook's fellow navigator, Vice-Admiral John Byron, commander of the HMS DOLPHIN which undertook a voyage of discovery 1764-1766. Byron was also the grandfather of the famous poet Lord Byron, who wrote of his grandfather's adventures and was honoured by Byron Bay's early settlers, who named town streets after famous poets.

The first European exploration of Byron Bay was made in August 1826 by Captain Henry John Rous who chose Byron Bay when seeking a navigable river and safe anchorage. Rous took soundings in the area which was then known by the Aboriginal name "Cavanba". However no moves towards settlement were made at this time.

During the 1840s the European cedar cutters came to the area. The valuable forests were felled in the hinterland and hauled by bullock to the beaches. The logs were then swum through the breakers and winched onto waiting cargo boats.

Timber cutting was still the only activity reported in the area in 1869, however one of the earliest freighters to be shipped from the Byron Bay district was the result of a shipwreck. In 1864 the HMS VOLUNTEER was blown upon the rocks at the Cape and wrecked spilling a cargo of tallow or animal fat, onto the sands of the beach, thus giving Tallow Beach its name.

By the late 1870s payable gold was being found on the north coastlands. Tallow Beach, south of the headland and part of the Cape Byron Reserve was extensively mined for gold during 1882.

It is assumed that Byron Bay's first permanent dwelling was constructed by David Jarman. Probably built during the 1870s, Jarman's "half-way house" accommodated travellers walking the beaches between Ballina and Brunswick Heads before there were any roads. The structure was apparently later shared with the Brooks family and described as a "hotel, shanty, small store, a bake shop and a butcher shop". ¹

It was not until 1884 that the town was first surveyed, by Surveyor Poate. In the following year sales of Crown lands began and all of the 40 allotments on offer were sold. More sales followed and settlement began in earnest, hastened by the construction of the jetty and Pier Hotel in 1888. In 1894 the name Cavanba was changed to Byron Bay, which was gazetted in 1896. Whaling operations became a major focus in the town together with dairy and abattoir industries. At Clark's Beach a small timber cottage remains, formerly the Norco pay office, it was dragged to the site by bullock team in the early 1900s.

DEVELOPMENT OF THE LIGHTHOUSE

The VOLUNTEER was the first of many shipwrecks at the Cape. By 1896 there were parts of no fewer than five wrecks on the beach of Byron Bay.² However despite the number of shipping disasters it appears that the authorities chose to wait before commissioning a lighthouse at the Cape.

A decision was eventually made to proceed with the construction of the Lightstation and tenders were called by CW Darley, the Engineer-in-Chief

¹Pratten, Christopher and Irving, Robert, "Cape Byron Headland Reserve Heritage Study" prepared for the Cape Byron Headland Reserve Trust, September 1991. p.12.
for Public Works in March 1900. The drawings, which formed the basis of the tendering, were produced under the supervision of Charles Harding, of the Harbour and River Navigation Branch. Harding is believed to have relied on Barnet’s well developed, earlier design approaches when the design for Cape Byron was formulated. Barnet retired as Colonial Architect in 1890.

Work began, the site was levelled, carried out by day labour. The contractors were Messrs. Mitchell King. The project included the lighthouse tower, with workroom and kerosene store room at its base, quarters for a Head Keeper and two Assistant Keepers, a signal station, a separate storage building and ancillaries such as flagstaff, steps, paving and fencing. Electric bells connected the lighthouse with the quarters and telephonic communication was established with the Telegraph Office at Byron Bay.

The Cape Byron lighthouse was officially opened on 1st December 1901 by the then Premier, the Hon. John See. The final cost for the project being 18,000 pounds. The local newspaper, The Northern Star, reported “It will render navigation safe and assist the safeguarding of lives and property and we will also convey the more welcome invitations of a harbour and a refuge”. 3

Of the apparatus the newspaper report stated “…the height of the focal plane above the high water level is 371 feet. The distance at the horizon, including refraction, is 22 nautical miles. The lamp takes six concentric wicks, the outer one five inches in diameter, and fed by kerosene oil…The occulting or revolving gear is worked by a clockwork arrangement, winding up massive weights in the centre of the tower. This gear, instead of working on rollers as with other revolving lights, floated in a mass of 850 lbs of mercury and the weight of the machinery so floated is about four and half tons. A great deal of wear and tear and friction is thus avoided. It is the first light that this has been applied to in Australia...” 4 Cape Byron was said to be the fastest flashlight in Australia, possibly due to the mercury float pedestal.

The lightkeeper’s cottages were described as “…very substantial, comfortable buildings, and fitted with every convenience. The rooms are lofty, and the walls, being of concrete, should be warm, cool and dry. They are roofed with red tiles, and have a very picturesque effect viewed from the ocean or from the land.”

The whole headland of Cape Byron was set aside for “Public Recreation and Preservation of Native Flora” as Reserve No.35620 and notified on 17 January 1903. 5

In 1933 Murray Watego was granted a special lease of Lot 131, north west of the Lighthouse on the foreshore of the beach and established his orchard and vegetable garden. Thus the name Watego’s Beach. Two other special leases were granted at the same time. Lot 129 was granted to Bernard Higgins who also established an orchard and vegetable garden and Lot 130 to Cyril Halpin for grazing. These represent the beginning of the Watego’s Beach subdivisions, a residential subdivision, cutting into the Lighthouse Reserve, along Lighthouse Road at Clarke’s Beach apparently begun in the 1940s.

A radar tower was erected during World War 2 at the south end of the precinct. It was described at this time as one of the most modern meteorological radar units in the southern hemisphere. 6

By the 1950s the area on the slope below the Lightstation was cultivated and included Watego’s banana plantation. The area was subdivided for public auction on 25th November 1961.

In 1959 electricity was introduced to the lighthouse. The conversion from kerosene greatly intensified the light, however the lighthouse remained manned for another thirty years.

In 1989 the Cape Byron Trust became the managing body and has done much to restore and preserve the history of the precinct. The Trust have been active in the protection of Aboriginal and European sites with a constant program of revegetation and regeneration among their major works.

In 1997 the Cape Byron Headland Reserve Trust was established under the NSW NPWS Act 1974, to manage the Cape Byron Headland State

5Pratten, Christopher and Irving, Robert, “Cape Byron Headland Reserve Heritage Study” prepared for the Cape Byron Headland Reserve Trust, September 1991. p.15.
6Pratten, Christopher and Irving, Robert, “Cape Byron Headland Reserve Heritage Study” prepared for the Cape Byron Headland Reserve Trust, September 1991. p.15.
Recreation Area, gazetted in July 1997. The Trust Board is appointed by the NSW Minister for the Environment for the care, control and management under the NPW Act.

The Trust is engaged in an ongoing program of the maintenance and conservation of the reserves and cultural heritage values. In addition a preliminary survey of the surrounding forests has been undertaken.

Conservation and restoration programs have also been carried out on the cultural heritage values of the Cape. This includes the reroofing of the cottages, reinstating the Marseilles terra cotta roof cladding (1992) and the renovation and painting of the interior of the Head Keeper’s Quarters (1993). The Assistants’ cottages were extensively conserved in late 1998, including renovation of kitchens and internal painting without disturbance to existing fabric. They are working successfully for holiday rental. Both retain large country style kitchens, spacious bedrooms and private yards. External colour schemes were changed from white to buff.

Prior to the NPWS handover AMSA proposed to subdivide the area into three lots to enable a lease for 99 years on Lots 1 and 2 only. Lot 3 contains the three cottages and the remaining open space and road. The existing light will be operated by AMSA into the foreseeable future. Lots 1, 2 and 3 of DP 847753 were gazetted into the Reserve on 4th December 1998.
2.2
Description of the Setting

THE COASTAL EDGE

Byron Bay is located on the far north coast of NSW, between Tweed Heads and Ballina and is well known as a tourist destination and mecca for surfers.

Cape Byron, rises above the town and is the most easterly point of the Australian mainland. It is visually prominent, rising some 94 metres above sea level. The Cape is flanked by coastal beaches and a lush hinterland.

The coastal beach immediately to the north of the point stretches towards Brunswick Heads, part of the beach is unusual on the eastern coast of mainland Australia a part of the beach faces north, as it links into the Cape. A State Forest also runs parallel to the coastal strip to Brunswick Heads, with coastal wetlands and littoral forest occurring closer to Byron Bay and the Cape.

A series of relatively undeveloped and unspoilt beaches interspersed by headlands extend south of the Cape to Broken Head Nature Reserve. These beaches are also flanked by dense green vegetation and forest and are clearly visible from the Cape Byron Reserve.

Tallow Beach at the southern base of the Cape runs south to meet Broken Head Nature Reserve.
THE HEADLAND

"...a tolerable high point of land bore north west, distant three miles: this point, I named Cape Byron. It may be known by a remarkable high peaked mountain lying inland north west by west from the Inland it is pretty high and hilly, but near the shore it is low; to the southward of the point the land is low, and tolerable level..." wrote Captain James Cook in his diary, May 15, 1770.

Cape Byron is a dramatic and most popular headland, being the most easterly point on the east coast of mainland Australia. Combined with other natural and cultural attractions including the lighthouse and the Cape Byron walking track, Cape Byron Headland has been recognised internationally as a tourist destination. The 1997 Visitor Survey indicates that over 400,000 people visit the Lighthouse precinct annually. It is also held in high esteem by the local community.

The headland is also popular for watching the migration of humpback whales, which peaks each year in June and July, when the whales head north and again in September and October when they return south.

The headland extends out into the South Pacific Ocean and features a varied and generally steep topography, its only major modification being the site clearing and levelling for the lighthouse complex. The geology of the Cape Byron Headland Reserve is unique in possessing some of the oldest exposed sediments of the Richmond Region. These sediments, the Brisbane metamorphics, formed the base of the Clarence-Moreton Basin around 250 million years ago. These folded metamorphosed sedimentary bedrock outcrops with greywacke, phyllites and slaty shales predominating, comprise one of the two main substrates that occur on the Cape. The other is localised peat and mud deposits occurring in the low lying areas surrounding the Cape.

The topography, aspect and variety of soil types on the Cape have resulted in the development of diverse and unique areas of littoral and headland rainforest, headland grasslands, coastal forests and woodlands, which have been modified over the last 100 years through their proximity to the established settled areas.

The Lighthouse precinct is located at the highest point in the Cape, south of the eastern most point. In addition to the Lighthouse complex, the reserve includes local beaches, surf schools and boat launching ramp, hang gliding and walking trails. Narrow roads and walking paths connect the various aspects of the headland surrounded by

the vegetation. A number of beach cottages, which were permissive occupancy under the Crown Lands Act, are being progressively renovated over the foreseeable future.

Meteorological equipment has been located at Cape Byron since 1948. As the most easterly point of Australia it is a significant location for weather information and is highly regarded source because of its 360 degree readings and long period of continuous records.

The northern section of the headland features two coves, Little Wategos and Wategos Beach areas. In the higher ground around Wategos Beach a number of residences have been constructed, sheltered by the eastern section of the headland and surrounded by littoral rainforest. The northern section of the headland also features Palm Valley and Aboriginal sites.

To the south the headland curves into Cosy Corner on Tallow Beach which stretches south to Broken Head Nature Reserve and the proposed Arakwal Nature Park.
ABORIGINAL RESOURCES

The NPWS Sites Register includes Site 4-5-0061 a midden, Sites 4-5-0117 and 4-5-0118, an open camp site and Site 4-5-0037, an open camp site, burial and midden defined only as “Cape Byron”. Other sites may also exist in the area including part of a midden (4-5-0061) which has been exposed as a result of the construction of drainage works and boat ramp. Other documented sites including a Bora ring and discontinuous midden have been covered by vegetation. Also reports of Bora/ceremonial grounds and burials at Tallow Beach, and a burial at Palm Valley.

Archaeological and historical records from Cape Byron indicate that Aboriginal people used areas within the reserve for hunting and gathering, and as a camp site (Collins, 1994; Pratten & Irving, 1991). To date one archaeological site has been formally identified on the reserve; open camp and shell midden 4-5-0061. The midden is the oldest dated foredune shell midden on the north coast of NSW (1440+/− 70 BP) and is providing information on the use of the resources of Cape Byron by Aboriginals.

THE LIGHTHOUSE PRECINCT

The Lighthouse Precinct is spread over a long, narrow ridge towards the south eastern section of the Headland. The Lighthouse is located at the eastern end of the precinct and just south of the most eastern tip of the headland. The Lighthouse is clearly visible from the township of Byron Bay and has commanding 360 degree views over the adjoining headland and beyond occupying the highest point of the Cape.

The Lighthouse group consists of the Lighthouse, the former Signal House, the former Head Keeper’s quarters, two semi-detached houses which were formerly the Assistant Keeper’s quarters, the workshop/paint store and the various steps, paths, fences, retaining walls, roads and paving, including the remnants of the Flagstaff. Immediately around the lighthouse, the vegetation has been reduced to undulating grassland. To the north west of the lighthouse tower are several exotic trees which mark the location of the former Keepers’ food gardens.

The semi-detached Assistant Keeper’s cottages are each surrounded by fences, which define private front and rear yards. The landscape around the cottages consists principally of lawns, defined by fences or flat areas which reflect the original site modification for the lighthouse. Planting is restricted to minor shelter belts, with the majority being planted in the last 30 years. A narrow, sealed roadway leads to the Precinct and connects to a smaller carparking area below the complex and the upper carparking area which is located between the two cottages, in the very centre of the complex. This carparking area includes the only place for short term bus and coach parking.

The headland topography has generally retained its natural form, with the exception of the access road and levelling for the lighthouse complex. The adjoining landform falls away sharply from the Precinct, with sheer cliffs and features a cover of coastal heath, being a combination of native and introduced species, mostly lantana and other weeds. Most of the goat herd, which had been originally kept by the former Keepers, has been relocated to an inland farm which has allowed the natural vegetation around the Lighthouse precinct to return and flourish.

The entire area is managed by the Cape Byron Trust. In late 1997 this was gazetted as a State Recreation Area. The Cape Byron Trust, which has care, control and management of the area now reports directly to the NPWS Director General.
LIGHTHOUSE TOWER

HEAD KEEPER'S COTTAGE

ASSISTANT KEEPERS' COTTAGES

CAPE BYRON LIGHTHOUSE FLOOR PLANS
(Source: 1993 AMSA Conservation Plan)
Not to Scale
Graham Brooks & Associates Pty. Ltd.
2.3 The Constructed Image

There are three principle and two support building structures located on the headland:

- The Lighthouse tower
- The Head Keepers Cottage
- Two semi detached dwellings for the Assistant Keepers
- Signal House
- Workshop/store.

There are also a number of outbuildings, including the Signal Station, workshop, a later garage and painted brick amenities block. Meteorological equipment is located in a room in the Assistant Keeper's cottage and is to be relocated to the Lighthouse Tower in Feb 1999.

THE LIGHTHOUSE TOWER

The structure is a white round concrete tower, 13.5 metres from base to balcony and overall 22 metres high with white light of 2,200,000 candelas with a range of 27 nautical miles.

The structure is located on the crest of the headland and features cylindrical form with clustering of crenellated service rooms and porch around the base of the structure. The lighthouse was the first to be built under that State's Navigation Department, following the abolition of the Marine Board of NSW. It was the first Australian installation of the mercury float mechanism devised in London. Similar mechanisms were to be installed in other lighthouses as their technology was upgraded.

The new and successful system of precast concrete blocks used at Point Perpendicular Lighthouse in 1899 prompted the use of the same scheme at Byron Bay in 1901. Apart from a few minor details both towers are identical, the 1899 working drawing for Cape Byron is virtually a tracing of its 1897 predecessor.5

It seems that concrete was chosen because of the greater cost of stone, difficulty in bringing skilled tradespeople to work the stone and the poor quality of the local stone. The alternative use of in-situ concrete similarly problematical. Based on the experience at the Green Cape Lighthouse (1881), the choice was precast concrete units.

Cape Byron was probably the third tower in Australia to be constructed using this method. The previous two being Point Hicks in Victoria (1888-90) and Point Perpendicular (1899).

The tower stands on a foundation of mass concrete. A tank with thick walls of concrete has been excavated into the rock at the base of the tower. The concrete blocks were rendered and trowelled with finishes including prewoked trachyte for the tower lantern balcony and balustrade. The floor slabs of the balcony are 406mm thick, supported on an concrete cornice and the stone balustrade had a moulded coping and panelled front. All decorative work was carried out by masons at the quarry. The balcony was originally paved with Val de Travers asphalt.

The tower has internal diameter of 3.6m and a height of 13.5m consisting of 4 storeys, the top one being the gallery at the base of the lantern. Its walls are 1.07m thick at the base, tapering to 762mm thick at the top. The intermediate floors are of mass concrete 300mm thick, the lowest about 600mm above ground level and all paved with small black and white tiles. Access to the upper floors is by means of spiral stairs of concrete built into the walls, with slate treads, brass tube handrailings and wrought iron balusters. The windows are of cast gunmetal frames glazed with thick polished plate glass.

At ground floor level there are a number of spaces including a projecting entrance porch, a lobby and two large rooms used for storage and as a workroom and volunteer Coastal Patrol. The porch features a trachyte floor and steps and a cedar entrance door with etched glass panels and sidelights. The lobby features a tile floor and trachyte steps, the other rooms feature asphalted floors and cedar windows.

The storeroom and lobby features a flat mass concrete roof supported on rolled iron girders and was originally paved in asphalt. All of the ground floor rooms are surrounded by battle mounted parapet walls which are penetrated by roof drains and iron water heads which bear the date 1901.

The lantern room was constructed with a floor of chequered wrought iron plate supported on rolled iron girders and the dado walling was of cast iron. A cast iron gallery with a floor of perforated cast iron supported on cast iron brackets and handrailings of wrought iron encircles the lantern room. Its roof is a dome covered in sheet metal and surmounted by a ventilator. A weather vane is located above which was connected to a dial indicating the wind direction so that the keeper on duty could regulate the admission of fresh air through the baffled gratings.

A first-order main light, manufactured in France, was the first lighting flasher lens system installed in NSW. The lens was rotated by gears driven by weights suspended in the central metal tube. Conversion to mains electric operation took place in 1959 and the power of the light increased.

AMSA retains use of the tower as the light remains in active navigational service, under the terms of the Heads of Agreement. Public access is only available under the conditions set out in the Heads of Agreement. The tower is in reasonable condition and is well maintained.

**HEAD KEEPERS COTTAGE**

The Head Keeper's quarters is a single storey detached house with five main rooms, kitchen, laundry, bathroom, store and verandahs. It is a good example of the typical Victorian Georgian style used by the NSW Colonial Architects Office for many of the late 19th century residences. The cottage also features a fuel room, toilet and poultry enclosure, and an underground water reservoir which is surrounded by original paving and picket and paling fences.

Precast concrete blocks have been used in the construction of the cottage. The cottage has been orientated to face east and features verandahs on the north, east, west and southern sides. The laundry, bathroom and store extend westwards.

The building features a simple hipped roof clad in terracotta tiles with three painted chimneys. The roof extends to cover the verandahs and is supported by iron verandah posts formed to simulate turned timber posts. Simple valances span between the posts. The front corners of the verandah features screen walls with timber framed multi-paned windows, plinth and engaged piers. These were added as a wind break.

The building features timber framed multi-paned double hung windows and two main doors, one at each end of the hall, with glazed panels and slate thresholds. The verandah floors feature a painted bituminous finish and rendered edging.

The interior of the building is planned with rooms, including sitting room, office, two bedrooms, a dining room and kitchen, accessed via a central hallway which spans the full length of the building.
The internal walls are hard plastered, with flush cement skirtings separated from the walling by a wide sunken bead moulding. The cottage generally features timber joinery and floors. Panelled timber doors feature moulded architraves, the front and rear door also features fanlights over. Some traces of early finishes such as a dado are discernible. Nearly every wall features high, simply moulded picture rails. Almost all ceilings have been replaced or covered with batten sheet material. The metal ceiling roses have been refixed in most rooms. The fireplaces, set in concrete chimney recesses feature brown glazed bricks mitred at the corners with bullnosed detailing. The hearth is clad in slate. The timber surround and mantle of Art Nouveau style, featuring three bevelled mirrors.

The kitchen and bathroom have been altered with the latter featuring 1990s fixtures and fittings. The laundry, one step down from the remainder of the cottage, features a tiled floor and modern equipment.

The underground reservoir is located at the southwest corner, constructed of concrete, its roof forms part of the rear exterior paving. The downpipes lead storm water to underground pipes which feed into the reservoir which can be accessed by a pit on the southern side.

A grassed terrace located north west of the building features the former fuel store, poultry yard and privy. The fuel room is now used as a storage shed and is paved in brick. A garage has been added to the former poultry enclosure and features a pitched, off centre, roofline. The original exterior WC is located adjacent. Timber fences bound the area around the structure.

The cottage had been used for lighthouse keeper accommodation until 1989 and the interior reflected a variety of tastes, colour schemes and fittings and fixtures. In 1992 the Cape Byron Trust undertook restoration work in the interior of the cottage and a new internal colour scheme was introduced.

The Cape Byron Trust have undertaken a number of repairs and works including the reinstatement of the terracotta roof tiles to the roofs and external painting changing the external colour from white to buff. NPWS has provided financial assistance to the Trust, with Trust staff carrying out the work. Maintenance of all buildings is ongoing.

The building currently incorporates office space, shop, interpretive centre and meeting rooms.

ASSISTANTS KEEPERS COTTAGES

This pair of semi detached cottages generally match the Head Keeper quarters in style, appearance and detail. They are also examples of the typical Victorian Georgian style used by the NSW Colonial Architects Office for many of the late 19th century residences.

A central party wall extends out dividing the front and rear verandah spaces shared by both residences. Internally a central corridor along the party wall connects the four main rooms with kitchen and laundry beyond. The cottages also face east and are symmetrical with hipped roof sections clad in terracotta tiles. The verandah posts, beams, floors, eaves, five chimneys, windows and doors are identical in detail to the Head Keeper’s quarters.

Each of the cottages features a detached fuel store with a gabled roof and external WC with parapeted roof. The southern residence retains the store area and its brick paved floor, however part of its southern verandah has been infilled using the corner screens to form an additional space. The northern former fuel store has been converted into a garage and features a hipped roof. Timber picket fences define and separate the front yards from the public roadway.

Each cottage also features an underground water reservoir with concrete upstand, trachyte top and iron manhole. A concrete path extends around the perimeter of the building.

SIGNAL HOUSE

This small building is also known as the Flag Locker. It features a single room less than two metres square constructed of bonded concrete blocks. Like the Lighthouse, the blocks were rendered on exposed faces before placement and feature chamfered edges to define the joints.

The structure features a heavy splayed plinth of concrete blocks and all corners including the door reveals are bullnosed. The door threshold features trachyte and the door is constructed of vertical boards with brass furniture. A small, metal framed window with opaque glass also features on the facade.

The top course of walling incorporates metal ventilators and cast brackets which support a moulded cornice. The cornice is surmounted by a low pitched pyramid base and a semicircular dome all rendered and tooled externally formed by a square pyramid shape which is visible
Internally, the structure features a concrete floor and timber shelving and pigeon holes for the storage of flags.

The exterior of the structure has been painted white. The interior has also been painted white, however it seems it previous was painted in colours such as browns and eau-de-nil.

WORKSHOP/PAINT STORE

This small building, located midway between the Head Keeper’s and Assistant Keepers’ Cottages is set in a small grassed and concrete kerbed area in the middle of the upper parking area.

The structure is a single room about 5metres x 4metres in size, constructed in the same system of precast blocks. The blocks however are simpler in detail and the building features no plinth. The timber framed hipped roof is clad in terra cotta tiles.

The facades feature two timber framed multipaned double hung windows and a boarded timber door. Both windows and door are set deep with exterior reveals. The door features a trachyte threshold and the windows have projecting sills.

Internally the beamed ceiling is exposed, the rafters are original however the battens have been replaced. The room also features a paved brickwork finish to the floor and moulded timber door and window architraves.
2.4

Heritage Significance

Cape Byron Lighthouse is possibly one of the most visited and highly recognisable lighthouses in Australia, located on a prominent headland which gains its tourism popularity as the most easterly point of the Australian mainland. The landmark and scenic qualities of the complex have great aesthetic appeal, the lighthouse tower in particular is a powerful and evocative element set high on the headland and clearly visible from a wide area around.

It is an important and representative example of the so called “coastal highway lighthouses” that were erected along the NSW coastline between 1862 and 1903.

HISTORIC SIGNIFICANCE

Cape Byron Lighthouse is significant as one of a number of major, so called “coastal highway” lighthouses in NSW, displaying the pavilion style. It was the second to be constructed of precast concrete blocks (the first being Point Perpendicular). The lighthouse was the first to be built under that State’s Navigation Department, following the abolition of the Marine Board of NSW and was the first Australian installation of the mercury float mechanism, devised in London.

The lighthouse and associated cottages are historically significant relating to the growth and development of the immediate area and importantly are part of a network of coastal lights which relates to a wider maritime development. The complex significantly contains other buildings and features reflecting the early history and arrangements of the Lighthouse complex including signal house, original fencing, pieces of original furniture, old cisterns and tanks, privies, stores, stable remains, paving and steps and flagstaff.

The precinct is significant for its associations with the engineers and Colonial architect department and navigational departments prior to and since construction.

AESTHETIC SIGNIFICANCE

The group of buildings and structures associated with the lighthouse are dramatically sited and make a dominant yet harmonious impact on the landscape. The Lighthouse Precinct is essentially a modified natural landscape of considerable cultural significance. The lighthouse tower and cottages are of high architectural quality and technical excellence and are largely intact.

The lighthouse tower exhibits a strong similarity with the later work of James Barnet, during his tenure as Colonial Architect, but develops a highly accomplished classical architectural language, which was used on the North Head and Point Perpendicular lighthouse towers.

The residential quarters in particular are largely intact examples of the Victorian Georgian style used extensively by the NSW Colonial Architect’s office throughout the late 19th century. Both exteriors and interiors of the Keeper’s quarters contain features of design and detail common to domestic architecture of the period as well as reflecting a response to the particular function of the buildings and the particular needs of the site with the provision of screens and walls.

SOCIAL SIGNIFICANCE

Cape Byron Lighthouse has high social significance with a very high level of public identity and support. It is held in high esteem by the local community with a high level of “ownership” associated with its image and location.

A large number of international and domestic visitors are attracted to the place given its image and location at the most eastern point on the Australian mainland. It is perhaps the most well known light in the NPWS collection.

SCIENTIFIC SIGNIFICANCE

The complex is technically significant, the concrete block method of construction of the Lighthouse and other buildings was only the second such technique used in lighthouse construction in NSW and was a response to the difficulty in building on a remote, isolated site. It contains an early twentieth century precast concrete block house group which is one of four such complexes.

The Lighthouse precinct contains sites of potential archaeological significance in the tip, stables, privies, cisterns. The overall reserve also features a wider range of interpretive and archaeological material including Aboriginal sites and natural fauna and flora with a wide range planting both natural and cultural and the whale migratory watching efforts.

The site retains significant meteorological equipment and continues to provide records of weather activity. Past records taken at the site are a significant resource and contribute to the significance of the site.
SIGNIFICANCE TO ABORIGINAL PEOPLE

The Headland is significant as part of the territory of the Bundjalung people and contains sites relating to Aboriginal life on the east coast of Australia.

The significance of Cape Byron for the local Aboriginal people is in the headland on which the lighthouse sits and the coastal frontage and their long standing associations with the area.

The area is also important as a place where tribal fighting took place and there is concern over burials. Possible ceremonial sites suggest that the place may have high cultural importance.

ELEMENTS OF PRIMARY AND CONTRIBUTORY SIGNIFICANCE

Grading the comparative significance of various elements or characteristics of an historic place or building is a useful management approach to support future programmes of detailed fabric or artefact conservation.

The majority of the conservation management plans prepared for AMSA included a graded table of significance for the various components of the lighthouse complexes, including landscape and archaeological features and of individual buildings.

The subsequent allocation of graded levels of significance in some of the CMPs is considered by this consultant to be overly complex and not beneficial in terms of providing a clear background to the conservation and management of building fabric or other elements.

The conclusions reached by the consultant team preparing this overall Conservation Management Plan have taken a different emphasis.

The characteristic considered to be the most important in relation to the NPWS Lighthouses is the manner in which they have evolved progressively while retaining their essential integrity and significant features. Accordingly a three tier significance rating has been adopted.

- Characteristics of Primary Significance
- Characteristics of Contributory Significance
- Characteristics of Little or No Significance.

Primary Significance:

All those elements and features that relate to the initial construction and operation of the particular Lighthouse and its supporting buildings and infrastructure. It includes the pre-existing topographical and landscape characteristics, initial cultural landscape features and sites of Aboriginal cultural significance.

Contributory Significance:

All those elements which relate to the subsequent use and development of the place as an operational Lighthouse, right down to the period when they were transferred to NPWS or other relevant agencies such as Australian Property Group (South Solitary Island) or the Cape Byron Headland Trust. It includes subsequent natural and cultural landscape features and post contact period sites and places of Aboriginal cultural significance.

Elements Of Little Or No Significance:

Generally only those items which relate to the subsequent re-use and development of the place after it was transferred to NPWS.
3.0 Constraints & Opportunities

This section confirms the listing status by various heritage agencies for the Cape Byron Lighthouse and summarises the views of relevant community members or representatives.

Refer to the main Plan for guidance with regard to the appropriate responsibilities and actions to be taken in relation to these listings and viewpoints.

3.1 Heritage Recognition & Listing Status

NATIONAL AGENCIES

The Cape Byron Lighthouse is listed on the Register of the National Estate (RNE) administered by the Australian Heritage Commission.

AMSA retains operational use of the tower, under the terms of the Heads of Agreement.

The Precinct retains Bureau of Meteorology monitoring devices and equipment, which will be relocated to the Lighthouse tower in Feb 1999, under an agreement with the Bureau.

STATE AGENCIES

The primary conservation and management framework for the Lighthouse is the NSW National Parks and Wildlife Act. The site of the Lighthouse complex is not currently gazetted within the Cape Byron Headland Reserve, but should be added to it. The Park is managed under the Cape Byron Headland Reserve Plan of Management, June 1991. This will need to be amended in accordance with the recommendations of this Plan.

Cape Byron Lighthouse has been listed as an item of State and Regional environmental heritage in the North Coast REP 1988 (amended 1994) issued by the NSW Department of Urban Affairs and Planning.

Cape Byron Lighthouse is contained within the NPWS s170 Heritage and Conservation Register, under the NSW Heritage Act and Heritage Amendment Bill 1998.

Cape Byron Lighthouse has been promoted by NPWS for listing in the State Heritage Register.

The Cape Byron Headland Reserve Trust have produced a Plan of Management for the Reserve setting out objectives to ensure the conservation and maintenance of the environmental and cultural heritage. A major achievement has been the ability to derive a considerable proportion of revenue required for the management of the Reserve from its own fund raising activities. The Trust now covers its recurrent costs, relying on public funds for grants and loans for special projects and capital improvements.

LOCAL GOVERNMENT

Byron Bay Lighthouse Complex is listed as a heritage item in recognition of its cultural importance, in the Byron Local Environmental Plan 1988. The Reserve is zoned 7 (f1) Coastal Land in recognition of the environmentally sensitive coastal land around the complex.

NPWS became the consent authority for the site when the Lighthouse complex was gazetted on 4th December 1998.

NATIONAL TRUST OF AUSTRALIA (NSW)

Cape Byron Lighthouse is classified by the National Trust of Australia (NSW).

ABORIGINAL COMMUNITY

The Cape Byron Reserve is associated with a number of Aboriginal communities. Jali LALC and Tweed Byron LALC are associated with the area, however they are in dispute of the boundaries.

Native Title Claims have been made over the region which includes the Lighthouse. There are two groups with relevant Native Title Claims, the Arakwal Corporation, who currently occupy one of the rooms in the Lighthouse complex, and representatives of the Wiradjub Clan of the Bundjalung Nation.

While some formal and informal consultation with the Aboriginal community is presently undertaken through the Memorandum of Understanding (MOU) between the NPWS and Cape Byron Trust, the Arakwal Corporation and some other groups over site protection and management issues, the Jali feel that there is not enough or the right balance of Aboriginal representation in the Cape Byron Trust. The Jali want more direct involvement in planning and management of the area. Major issues concern the traditional association with the area, access
and site management.

The Aboriginal communities have expressed their desire for joint management of Cape Byron area concerning land management, site protection and community access. They also seek further representation on the Cape Byron Headland Trust for people with knowledge or training in cultural heritage; including an Aboriginal site officer.

LOCAL COMMUNITY

The Lighthouse is a prominent feature of the Byron Bay townscape and it is clear that the local community hold the Lighthouse in high regard. It has become the symbol and logo for many local businesses and features in much of the local literature and tourism guides.

The current composition of the Cape Byron Headland Reserve Trust membership reflects a reasonably wide representation of local people. There is an active consultation process with the local community and with Local Government.

Local representative and volunteers work with the Cape Byron Trust and have contributed to the promotion and operation of the complex as a major tourist and interest destination.

TOURISM OPERATORS

Cape Byron is a major attraction as the most easterly headland on the Australian mainland. In addition whale and dolphin watching from the headland is also a major attraction. The complex not only caters for bus tour operators taking groups directly to the complex but also affects local tourism generally with many people making their own way to the complex directly from the town.

The Trust has agreements with many of the larger or more regular bus operators, to co-ordinate and spread bus arrival times in order to minimise congestion in the immediate Lighthouse precinct. Other bus operators, who simply turn up unannounced, present more management problems in this regard.

The Trust currently has licence agreements with several specialist tourism operators for use of sections of the Headland. These include dive boat operators working off the nearby beach and hang glider operators working off the upper headland.

3.2 Conserving the Cultural Resources

THE CONDITION OF THE BUILDINGS AND STRUCTURES

The lighthouse tower and cottages are generally in good condition both internally and externally, although there is severe rusting of a steel beam in the upper level of the tower. The Cape Byron Trust have generally maintained and carried out a number of works including the reconstruction of terracotta tiles to the cottages. This work received a Heritage Assistance grant. The lighthouse remains painted white and is well maintained by AMSA, with some key aspects requiring repair or conservation work.

Buildings were recently painted externally with "buff" coloured walls, at the advice of heritage consultants. This colour selection was based on paint samples (which showed that white had been dominant wall colour) and a desire by the Trust for a more distinctive external colour scheme. Paint ($30,000.00) was sponsored by Dulux.

Main buildings were painted internally in December 1998.

The Signal House and the Workshop/paint store are also in good condition and well maintained.

The painted brick amenities block located at the entrance of the Precinct however is in degraded condition and impacts on the overall presentation and use of the Precinct. It will be demolished once the new toilet block is completed.

CULTURAL AND NATURAL LANDSCAPES

Cape Byron is the most easterly point of mainland Australia. The Cape Byron Reserve features both cultural and natural landscapes which interact and contribute to the character and significance of the place.

The coastal edge or backdrop at Cape Byron consists largely of a natural landscape, the sections of littoral and coastal forest and woodlands and coastal topography provide an important backdrop to the Lighthouse Precinct. Tallow Beach to the south is relatively undisturbed, with little development at present in its immediate vicinity. Access is limited to foot or four wheel drive only under emergency or special lease arrangements.
North of the Cape, the Watagans beach area is surrounded by small scale residential development and holiday houses. These are surrounded by an essentially green infill. Clarke and Main Beach areas are bounded by more dense development however is relatively low scale and natural elements are also maintained.

The headland essentially consists of 98 hectares of conservation and recreational reserve. It features natural elements such as littoral and headland rainforest and grasslands and metamorphic rock formations which form the most eastern point of the Australian continent. In addition it is an important vantage point of the natural seascape as whale and dolphin watching is an important element and feature of the headland.

The natural features of the headland are balanced by the cultural features such as the Lighthouse Precinct, Aboriginal sites, the Palm Valley reserve and Cape Byron Walking Track system.

The cultural and natural landscape and the various associated values is seen as the Trust's product. Its business is to protect, conserve and enhance these values, to develop and maintain an infrastructure of facilities and services which can provide an appropriate and quality visitor experience.

An on-going programme of rehabilitating the native vegetation communities has commenced, protecting both the native flora and fauna. The primary aims of management currently aim at conserving and maintaining the environment and heritage of the Reserve whilst promoting an understanding of the cultural and environmental significance of the headland. The challenge is to provide for the recreational needs of the visitors, interpret the various values of the place and to manage the Reserve on a self funding basis.

The Lighthouse Precinct is essentially a modified natural landscape of considerable cultural significance. The spatial composition and landscaping of the place is significant. The Trust have undertaken conservation and restoration programmes within the Precinct including painting of the Head Keeper's Cottage and reinstatement of the terracotta roof tiles to the cottages.

ABORIGINAL CULTURAL RESOURCES

The Trust has undertaken an Aboriginal Heritage study and Archaeological Survey of the Cape. A number of sites have been recognised, the Trust recently carried out an archaeological investigation of an open camp and shell midden at Palm Valley, the oldest site of its type recorded in the area and possibly the only one remaining. This was done with the support and assistance of the local and Aboriginal communities however more investigation is generally required. More information in this area will assist in the conservation, protection and presentation of this important value.

There are two Aboriginal groups and native title claimant groups associated with the Cape Byron headland, however at present only one of these groups, the Arakwal Corporation, is actually represented on the Trust and consulted on a formal basis. The MOU that exists between the Arakwal Corporation, Cape Byron Trust and NPWS sets up a system for formal consultation including an arbitration process and employment agreement. Other groups have informal liaison with the Trust and NPWS over site protection and management issues.

Further Aboriginal representation and more direct involvement in the planning processes undertaken by the Trust, is seen as a critical factor in the future use and management of the place.

HISTORICAL ARCHAEOLOGICAL RESOURCES

The Lighthouse Precinct has the potential to yield information related to the initial construction of the complex and subsequent use and development of the area through the surviving archaeological material. It should be regarded as an area of high archaeological sensitivity.

There may also be historical references related to the growth and development of the outlying area that was subdivided from the remaining precinct in the early 1900s. Although farmed and subsequently subdivided there may be some remains related to the initial use by the Lighthouse Precinct and keepers.

NAVIGATIONAL AIDS

Under the terms of the Heads of Agreement AMSA retains operational use of the Cape Byron Lighthouse tower. NPWS therefore will need to cooperate with AMSA in the overall management of the Light and complex in general. As technology changes, AMSA should liaise with NPWS to ensure that the installation of future systems does not impact on the significance of visual ambience of the place.
3.3 Other Management Issues

PRECINCT & SITE MANAGEMENT

The Cape Byron Headland Reserve Trust is fiercely independent and very keen to retain control over its operations and financial independence. It reports to the Director General NPWS. The Trust is widely recognised and acknowledged by DLWC, AMSA, NPWS, local community groups and others as having responsibly managed the reserve's natural, cultural and financial assets.

The Trust is very aware of the strong local interest in all of its activities. There is a strong consultative process involved for all its major decisions, particularly as the Lighthouse is clearly visible from the township of Byron Bay and is held in very high regard by all of the local townspeople. It forms a major logo for many community and commercial operations.

The Trust is generally very conscious of the National heritage qualities of the place and also works very carefully with heritage consultant advice about major works.

It is clear that there are a number of issues related specifically to the Lighthouse Precinct and its use and appreciation. Elements such as access and circulation, allowing visitors to get to the Precinct and then enjoy the buildings and ambience of the place. Currently resolution of the visitor car parking situation and provision of additional visitor facilities especially new public toilets are the primary priority. Both issues need to be resolved and ensure that the values of the precinct are not degraded or impacted on.

Generally Precinct and site management issues and priorities relate to:

- Visitor Access & Parking including bus parking and residential visitor parking on grassed areas
- Trust use of Lighthouse precinct and staff parking at rear of Head Keeper's quarter's
- Revenue generation – car parking including parking charges at Palm Valley, organisation of licences
- Use of the various buildings
- Interpretation
- Provision of visitor facilities, new toilets
- Building and Precinct maintenance
- Weed and landscape management
- Access for the disabled
- Actions against theft and vandalism

Visitation to the precinct combines a regular pattern of locals showing it off to friends, a regular part of the walking tracks for townspeople, self drive tourists and tour buses, many on day trips from the Gold Coast. Roads are narrow and overcrowded during peak periods. There are often conflicts between pedestrians and vehicles on the narrow approach roads. In addition the seasonal peaks are high, especially during public and school holidays.

The Lighthouse Precinct is located on top of a narrow ridge, reached by a narrow and steep roadway. Vehicle parking within the immediate precinct is a major problem and at a crucial point of development. It severely degrades the ambience of the precinct, especially during the busy periods, but provides a major source of revenue for the Trust. At peak times there can be a queue of cars held over in the approach road by parking wardens who limit the number of cars and buses in the upper precinct.

There are only two options for car parking close to the top of the ridge, at the immediate entry and in the space between the Assistants and Head Keeper's Cottages. Additional area outside the immediate precinct is severely restricted, but includes walking tracks along the cliff top including that to the easterly lookout which is a popular tourist destination and is generally accessed through the Lighthouse precinct.

The pressure on the parking capacity is making other decisions difficult. For example there is a resistance to establishing a visitor cafe or refreshment facility in the Head Lighthouse Keepers Cottage as this will increase the length of stay of many visitors and therefore slow down the turnover time of the carpark. In addition the current cafe at Palm Valley functions well.

There are long term plans to provide a remote location car parking facility and shuttle bus service, but these are not being actively planned at present.

There is a current proposal to build a new visitor toilet block behind the Head Lighthouse Keepers Cottage and demolish the existing block, which is inappropriately located at the entry to the immediate precinct. This proposal has been carefully developed in consultation with the advice of a heritage consultant.

The Trust has a number of revenue sources outside the immediate Lighthouse precinct, including licensing fees for dive boats and hang gliders, parking fees, and Cafe building lease. A number of beach cottages elsewhere in the
Reserve are progressively becoming available and will be renovated for holiday accommodation, producing very strong longer term income streams for the Trust.

BUILDING CONSERVATION AND RE-USE ISSUES

The buildings within the immediate precinct act as AMSA lighthouse, Volunteer Coastal Patrol base, offices and workshops for the Trust staff, Holiday Accommodation, interpretative centre, retail outlet and Arakwal office.

The buildings are generally in good condition and a regular maintenance routine should suffice in terms of conservation activities. A major refurbishment, costing $60,000 was completed in December 1998. Currently only minor works are required to the buildings and elements, for example some of the fencing at the rear of the Assistant Keepers Cottages needs to be replaced.

Recently major rusting to a steel roof beam caused major structural damage to the roof membrane, external and internal walls. This was AMSA’s responsibility and is reported to have been repaired.

The conversion of the Head Keepers Garage into additional office accommodation has released one room in the Assistant Keepers Cottage for an additional bedroom.

The Assistants Keepers Cottages operate successfully as holiday accommodation, and have been redecorated and refurbishing internally to make them more attractive. Kitchens and bathrooms have been reworked and an indoor toilet added in the bathrooms. The existing room layouts are adequate. Proposed works include moving the office area and upgrading the kitchens and bathrooms. The currently split rooms will be reversed also.

There is a small freestanding store building in the middle of the carpark, which used to be the shop but is now used only as a storeroom. Long term planning for re-use has not been resolved, although it is currently used as an office for the Cape Byron Friends Volunteers Group.

The main house supports some office accommodation and meeting room, the shop and one room will soon be fitted out for a “Welcome In” Interpretation Centre. The room layout is considered adequate, although there has been discussion about opening one wall to combine two adjacent rooms. This wall does not contain a fireplace.

There is some discussion within the Trust for the establishment of a refreshment facility within the building, but there is no real support while the parking situation remains unresolved.
TOURISM MANAGEMENT ISSUES

Managing the site in terms of cultural tourism is a major priority, particularly as the site is at a crucial point in terms of vehicle access and parking. A good interpretation programme is required to improve visitor understanding of the significance of the lighthouse and precinct.

The two cottages operate very successfully as holiday accommodation, enjoying a 95% occupancy rate and providing a major source of income $100,000.00 pa, with about a 75% profit margin. The previous managing agent treated the cottages as just another typical facility in Byron Bay village. They have been replaced with a more aggressive and imaginative operation, such as packaging special weekend lets for the Sydney market, now that Ballina has a jet service.

The shop in the Head Keepers Cottage is a very successful and well managed operation. It sells a wide range of high quality, imaginative, locally designed and manufactured items, which reinforce the character of the reserve and township. This financial year, turnover is expected to top $300,000.00, with a reasonable net profit margin.

The Lighthouse Precinct is a fine location for sunrise and sunset viewing but is generally closed to the general public from 5.30 pm to 8.00 am. This provides privacy for the cottage visitors, reduces staff pressures and returns the precinct to a resemblance of its former self as a place of specialist operations. Local people who wish to use the headland walking tracks out of hours sign an access agreement and are given a gate key.

The value added opportunities provided by the natural and cultural features such as, tours to the lighthouse tower and marquee events should be considered.

Current and mid term proposals to facilitate cultural tourism include:

- Interpretation centre to be fitted out in one room of Head Keepers Cottage.
- Construction of a new public toilet block to replace existing.
- Renovation of old garage for office accommodation to release another bedroom within holiday cottage. (completed)
- The Draft Plan of Management is to be released in early to mid 1998 and placed before the community as the basis of on-going activity.
4.0 Primary Conservation Policies for the Cape Byron Lighthouse

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part D of the Conservation Management and Cultural Tourism Plan, the following primary policies establish the essential conservation framework for the Cape Byron Lighthouse.

- The Cape Byron Lighthouse shall be retained and managed by NPWS as a key contributing component of the overall NPWS Lighthouse Collection.

- The Conservation Policies and Implementation Guidelines contained in the overall Conservation Management and Cultural Tourism Plan shall be applied, as appropriate, to the Cape Byron Lighthouse.

- NPWS shall gazette the Lighthouse site as an Historic Site, in recognition of its complex cultural and natural significance.

- NPWS shall conserve and manage the lighthouse complex as a collection of fine historic buildings and supporting site features that clearly express its original functional role and which has gradually evolved since initial construction in response to progressively developed coastal navigation technology and organisational practices. Recognition and respect for the evolving development of the complex from 1901 until the mid 1980s shall form a key basis for conservation and management of the buildings, technology, artefacts, archaeological sites and infrastructure. Refer to Section 17.1 of the main CM&CTP for the Conservation Principles related to fabric, features and associated artefacts of differing significance.

- Conservation of the Cape Byron Lighthouse shall protect, respect and where appropriate enhance the identified and closely interrelated characteristics of cultural and natural significance of the place, in its own right and as a component of a larger state, national and international network of late 19th and early 20th century lighthouses.

- All essential and outstanding catch-up repair and conservation works to the buildings and site elements shall be undertaken within a period of one year.

- The buildings and site elements shall be conserved by the implementation and long term continuation of a rigorous, cyclical and appropriate maintenance regime, starting immediately. This regime shall seek to maintain the buildings and site elements in a character and condition that equates to the time when the complex was an operating lighthouse facility, with a full time staff.

- NPWS shall conserve and manage the immediate site and setting as a modified natural landscape with important cultural landscape characteristics that clearly illustrate the development and occupation of the precinct as an operational lighthouse complex, from 1901 until the 1980s.

- NPWS shall conserve and manage the wider Cape Byron Headland as a modified natural landscape with cultural landscape features that illustrate the layers of human occupation and settlement, including that by Aboriginal people.

- NPWS shall conserve and manage the Aboriginal heritage characteristics of the Headland in consultation with the relevant representatives of the local Aboriginal communities.

- NPWS shall conserve and manage the complex and its setting in a manner which communicates and interprets the multi-layered nature of its cultural and natural significance to the general public.

- NPWS shall facilitate the on-going operation of the lighthouse tower by AMSA as an operational navigation aid, within the framework of the Heads of Agreement between AMSA and the State of NSW.

- NPWS shall conserve and manage the complex by means of adapting the interiors of the former cottages and support buildings to new uses which are identified in the site specific Interpretation and Tourism Plans and which are compatible with their evolved architectural and spatial characteristics and cultural significance.

- NPWS shall continue to conserve and manage the complex in the context of the Cape Byron Headland being a popular
cultural tourism destination and lookout venue for whale watching. Internal adoption of the cottages and support buildings shall support approved uses associated with site management, interpretation and cultural tourism.

- NPWS shall continue to utilise the Head Keeper's Cottage for a combination of site administration, interpretation, retail, food services and visitor facilities. The Assistant Keepers' Cottages shall continue as short term equitable holiday accommodation.

- With the exception of the proposed new public toilet block to replace the current intrusive structure, there shall be no new permanent buildings erected within the immediate Lighthouse precinct. The design and positioning of any future navigational equipment or energy source infrastructure shall be carefully considered to avoid or minimise any adverse impact on the heritage or visual characteristics of the overall lighthouse precinct.

- NPWS shall develop strategies and actions which significantly reduce the amount and frequency of visitor car and bus arrivals into the immediate precinct of the Lighthouse cottages.

- NPWS shall conserve and manage the Cape Byron Lighthouse in full recognition of the heritage and environmental management provisions of the relevant aims, objectives, standards and procedures of the Australian Heritage Commission, NSW Heritage Council, NSW EP&A Act, Regional and Local Environmental Plans, the National Trust of Australia (NSW), NPWS and good conservation practice as promoted by Australia ICOMOS.

- NPWS shall co-ordinate the marketing and promotion of interpretation and cultural tourism activities at the Cape Byron Lighthouse, with the overall NPWS Lighthouses collective resource by reference to the Lighthouses Marketing and Promotions Unit within the Community Relations Division.
5.0 Site Specific Conservation Policy Implementation

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part E of the Conservation Management and Cultural Tourism Plan, the following guidelines establish the essential implementation framework for the Cape Byron Lighthouse.

The Conservation Policy Implementation recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

These site specific recommendations are framed in the same categories as the Conservation Policies and Implementation Guidelines of the main Plan, for ease of cross reference.

5.1 Reference to Main CM&CT Plan

SHORT TERM

- Refer to the Conservation Policy and Implementation Sections of the main NPWS Lighthouses Conservation Management and Cultural Tourism Plan. Read all of the following policy implementation recommendations in association with the larger policy framework.

- Participate in the Service wide review and assessment of the CT&CMP.

MEDIUM TERM

- Give special regard to the NPWS management recommendations and other general policies contained in the CM&CTP. In this regard, ensure that close liaison is maintained with all relevant stakeholders, particularly those concerned with heritage management and tourism operations.

- Manage the site in accordance with general NPWS management policies and guidelines, although in the case of Cape Byron, it is recognised that the Headland Trust has a special relationship and reporting framework with NPWS.

- Review and update the Cape Byron Headland Plan of Management in accordance with the findings and recommendations of the final CT&CMP.

- Facilitate the co-ordination of the Cape Byron Lighthouse conservation management and cultural tourism activities with the remainder of the NPWS collective resource. In particular contribute the experiences and lessons from the past ten years of cultural tourism activities to the other Lighthouse managers through the Lighthouse Reference Committee.

5.2 Aboriginal Heritage Conservation Policy Implementation

SHORT TERM

- Review the findings of recent Aboriginal site surveys and the previously collected knowledge.

- Review the current consultation processes with representatives of the Aboriginal community.

- Prepare medium term plans for undertaking further site surveys which will enhance the overall understanding of the Aboriginal cultural resources.

MEDIUM TERM

- Undertake additional research and site surveys to expand the knowledge of Aboriginal cultural resources.

- Refine and expand the consultation process, utilising an MOU or appropriate consultation mechanism with the local Aboriginal community. The MOU should also address issues of Aboriginal involvement in planning decisions.

- Investigate the feasibility of utilising Aboriginal owned land for the establishment of short term parking, associated with the provision of mini bus style transportation to the summit.
• Maintain active liaison regarding any Native Title issues that may relate to the Headland and the Lighthouse precinct.

LONG

• Continue active consultation with the Aboriginal community to expand the understanding of their cultural heritage and involvement with the management and cultural tourism programmes at the Lighthouse and the headland generally.

5.3 Landscape Conservation Policy Implementation

SHORT TERM

• Continue weed management programmes.

• Continue grass maintenance around the cottages

• Continue existing fire management regimes as appropriate.

MEDIUM TERM

• Review and prepare an inventory of the important natural and cultural landscape features of the Headland and the Lighthouse precinct, which must be protected into the longer term, including food gardens, fencing, cleared areas and areas of bushfire management.

• Ensure that appropriate Aboriginal and historical archaeological research is undertaken before any major landscape management programmes are commenced.

• Update the weed management plan.

• Undertake upgraded weed management programmes on a cyclical basis.

LONG TERM

• Periodically review the weed management plan and upgrade as necessary.

5.4 Built Environment Conservation Policy Implementation

SHORT TERM

• Complete any outstanding components of the catch up repair programme.

MEDIUM TERM

• Implement a rigorous building maintenance programme.

• Repaint the external walls of the cottages and support buildings to the traditional white.

LONG TERM

• Repair or replace deteriorated elements of building fabric, generally by replacing like with like.

5.5 Historical Archaeology Policy Implementation

SHORT TERM

• Review known information regarding historical archaeological resources.

• Collect copies of relevant historical documentary material that may provide background research in future archaeological assessments.

MEDIUM TERM

• Formulate an archaeological zoning plan for the Headland.

• Undertake additional archaeological assessments of areas with known potential, particularly if development proposals are under consideration.

LONG TERM

• Ensure that any archaeological management activities are undertaken in accordance with the NSW Heritage Act, Heritage Amendment Bill 1998 and Service policies.
5.6 Lighthouse Precinct Conservation Policy Implementation

SHORT TERM

- Complete the construction of the new public toilet block and the consequent demolition of the existing block.

- Implement more rigorous co-ordinating policies with tour bus operators to stagger bus arrivals and reduce the number of buses on site at any one time.

- Relocate the tour bus short term parking spaces to be closer to the Assistant Keepers' cottages and away from the immediate foreground of the Lighthouse and Head Keeper's cottage.

- Identify measures to reduce the number of visitor cars allowed to enter and park in the immediate Lighthouse precinct.

- Maintain rigorous rubbish management programmes.

- Reconstruct the flagpole.

MEDIUM TERM

- Review the policy of permitting visitor cars and buses to park within the immediate precinct.

- Restrict any use of the paved areas between the cottages for bus turning and drop off. Relocate buses parking area to the small ridge top parking area before the main gate.

- Restrict visitor car access into the precinct to those required for disabled access.

- Identify and develop new car parking further down the hillside, even if it means creating a number of small sites.

- Move the parking toll collector down the hill.

- Remove the majority of the vehicle paving from the immediate precinct and re-landscape.

- Establish an alternative system of providing the majority of visitor access to the Lighthouse precinct, such as by using mini buses from a remote car parking or drop off area during peak periods.

- Establish limits on the number of staff cars that can be parked within the precinct during the day, in order to reduce the overall number of vehicles on site.

- Progressively monitor site safety issues. Upgrade as required, after consideration of likely impact on significant characteristics.

- Maintain general site security activities.

- Liaise with AMSA to ensure that the progressive introduction of new navigational technologies into the overall precinct does not negatively impact on the significant characteristics.

LONG TERM

None identified

5.7 Building Adaption Policy Implementation

SHORT TERM

- Complete the re-use of the garage behind the Head Keeper's cottage for NPWS operations.

- Remove the NPWS operations from the second Assistant Keeper's cottage and reallocate the rooms as holiday accommodation.

- Complete the upgrading of kitchens and bathrooms of the Assistant Keepers' cottages for holiday accommodation.

MEDIUM TERM

- Identify an effective re-use opportunity for the free standing store building which will enhance interpretation programmes.

LONG TERM

- Ensure that any future building adaption programmes respect the architectural nature and spatial arrangements of the particular building.

- Ensure that any future programmes of reuse are undertaken in accordance with the recommendations of the site specific Interpretation Plan.
5.8 Interpretation Planning Implementation

SHORT TERM

- Co-operate in and contribute to the implementation of the NPWS Lighthouses Collective Resource Interpretation Plan.

- Consolidate relevant historical documentary and other material.

- Identify any likely subjects for oral history capture, from both the Aboriginal community and those who were part of the operational phase.

MEDIUM TERM

- Commission and implement site specific Interpretation Plan, to be prepared within the framework of the NPWS Lighthouses Collective Resource Interpretation Plan.

- Implement oral history programmes.

- Implement image capture programmes.

- In accordance with the Interpretation Plan, supplement interpretive signage within the precinct.

- Provide interpretive displays in the rooms at the base of the Lighthouse tower not otherwise used by the Volunteer Coastal Patrol.

LONG TERM

- Periodically review and upgrade the site specific Interpretation Plan and interpretive activities.

5.9 Cultural Tourism Policy Implementation

SHORT TERM

- Complete the installation of the "Welcome Inn" interpretive and introductory displays.

- Accept that there is a conflict between the revenue gained from the high level of visitor car and bus parking within the Lighthouse precinct and the maintenance of an appropriate ambience for the protection of heritage significance.

- Agree that there needs to be a resolution of visitor parking within the precinct even if this means a reduction in total income for the Trust.

MEDIUM TERM

- Prepare a site specific tourism plan.

- Reconcile the impact of car parking on the immediate qualities of the precinct by identifying and implementing alternative visitor parking options.

- Investigate and implement alternative arrangements for access to the site by the majority of visitors, particularly during peak periods.

- Liaise with AMSA regarding the provision of carefully supervised tours up the Lighthouse tower.

- Periodically review and amend operator licences for the organised recreational activities that take place on the Headland.

- Complete upgrading of the other beach cottages to provide additional holiday accommodation at no physical affect on the Lighthouse precinct.

LONG TERM

- Consider the long term upgrading of the access road to the upper headland, in a manner which improves the traffic management issues without adversely affecting the heritage and landscape qualities.

- Consider the provision of a café style operation as part of the Head Keeper's cottage, including possible spill over use of the side verandah, while not changing the landscape quality of the place. There should be no permanent shade protection, planters or domestic style furniture elements, although temporary seating is acceptable.
6.0

Bibliography


Pratten, Christopher and Irving, Robert, "Cape Byron Headland Reserve Heritage Study" prepared for the Cape Byron Headland Reserve Trust, September 1991.


Supplementary Information

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1.0 Introduction

1.1 Relationship to main Conservation Management and Cultural Tourism Plan

This Supplementary Information on the Green Cape Lighthouse supports the NPWS Lighthouses Conservation Management and Cultural Plan. It provides site specific Building and Site Description Overview, with information and analysis to assist the relevant NPWS managers translate the findings and recommendations of the main Plan into the site specific issues.

This Conservation Management and Cultural Tourism Plan and this Supplementary Information supersedes the Green Cape Conservation Management Plan prepared for AMSA in 1993.

In accordance with the project brief, the information contained in Section 2 of this Supplementary Information has been drawn from the AMSA Conservation Plan but summarised and rearranged for consistency across the whole NPWS Lighthouses resource.

The information on Aboriginal heritage and its significance to Aboriginal people, is based on the research and discussions undertaken by Mary Dallas during the preparation of the main Plan.

The detailed historical background and building analysis contained in the AMSA Conservation Plan has been reproduced and is attached to this supplementary plan as reference material.
2.0
Understanding the Resource

2.1
Historical Background

ABORIGINAL MYTHOLOGY

The area is associated with the Yuin Nation. The mythological associations of the area are unknown, however there area number of local Aboriginal people currently researching early histories. No specific information about the headland has emerged to this stage.

Two camp sites are located in the area and local information suggests that many more sites are located on the headland, suggesting occupation and use.

The Imlay family of European entrepreneurs operated a whaling station in the vicinity and apparently employed many Aboriginal families, providing equal pay and conditions. Brass plates were awarded to Aboriginal crewmen who were considered natural leaders. Some of the Aboriginal families even adopted the Imlay surname.

EUROPEAN DISCOVERY & EARLY SETTLEMENT

Green Cape is a prominent headland extending south east into the Tasman Sea. It was first described by Matthew Flinders in February 1798, when he passed in the schooner FRANCIS on his way south to the Furneaux Islands.

It is said that George Bass landed to the north of the Cape area and discovered "Two-Fold Bay" in December 1797, intending to explore the adjoining coast on his return from his whaleboat voyage.

In February 1798, while Bass was still away, it seems that Matthew Flinders added the point to his chart, writing in his journal "we came abreast of a smooth, sloping point which, from its appearance, and being unnoticed in Captain Cook's chart, I named Green Point." It is recorded that Matthew Flinders moored in Disaster Bay in 1802 where eight of his men were lost after they went ashore for water, deriving the name "Disaster Bay".

In the 1840s the Imlay family established a whaling and grazing operation north of the Cape and became the first Europeans in that area. An unfinished house at Bittangabee Bay is thought to have been built by the Imlay brothers. From this position the Imlays held a commercial advantage, attacking north bound whales, before their competitors operating from Twofold Bay could reach the whales. As a result Benjamin Boyd sent a whaling ship to Bittangabee in 1844 to compete with the Imlays and subsequently took over the Imlay business in 1848.

Boyd, a London stockbroker, came to NSW in 1842 with visions of building a commercial empire. By 1844 he held one of the largest land holdings in the colony with extensive interests in the Monaro and Riverina. At Twofold Bay he established Boyd Town as a port to support his Monaro properties. This was followed by a whaling station at East Boyd.

Boyd's Tower, at Red Point on the southern shore, stands a monument to Boyd. Constructed as a lighthouse from sandstone quarried in Sydney, it never came into official service due to a dispute with the Government, and was mainly used for spotting whales. Boyd's empire collapsed after only seven years and he left Australia in 1849. After Boyd's departure, George Davidson used the tower for whale watching.

As development of the area continued, the Cape proved to be a significant obstacle to coastal shipping, projecting out in the path of vessels which may be travelling close to shore to avoid the current. The shoreline of Disaster Bay, south of the Cape, is aptly named as many ships were wrecked in this area. One was the paddle steamer CITY OF SYDNEY, which struck rocks in November 1862 during heavy fog. No lives were lost, however the ship was totally destroyed.

In the following year the schooner ALMEDA, bound for Melbourne with a cargo of cereal, was struck by a gale and was subsequently abandoned and sunk. Her crew struggled in boats for twenty six hours before finding Green Cape. There was no light at this time, so the Captain and Steward walked overland to Twofold Bay for help.
DEVELOPMENT OF THE
Lighthouse

The necessity for placing a light on Green Cape was first discussed in 1873, at a conference of the Principal Officers of the Marine Department. At a subsequent sitting it was resolved that, in view of the traffic on this coast and the projection of Green Cape, a first order revolving light be erected on the Cape. A number of ship wrecks in Disaster Bay also contributed to the decision. However it was not until the following decade that work was begun.

In 1879 a sum of money was allocated and the Colonial Architect visited the site to determine the best location for the light. Plans were prepared and tenders invited in May 1880. None of the tenders were satisfactory and new tenders were then called. Initially the tower and quarters were to be constructed of stone; this was amended for the second tender when it was decided that the tower be constructed in concrete and the quarters in brickwork.

The successful tenderer was AW Aspinall who began work by erecting a jetty and store at Bittangabee Bay, seven kilometres from the site. A wooden tramline was also constructed and excavation for the lighthouse began in June 1881.

Aspinall soon met with difficulties, finding deep clay at the selected site which resulted in deep concrete footings. Having finally overcome the problems of the footings Aspinall soon experienced financial problems which saw his creditors complete the work in 1883.

The light was first exhibited on 1 November 1883. Designed by James Barnet it was constructed of mass concrete, the second of Barnet's three major towers of mass concrete and also the tallest. It was the largest concrete structure of its time in NSW and the first lighthouse built to an octagonal design on a square base, to make it easier to construct the wooden framework. The similarity of this architectural form to the earlier, timber framed, lighthouse at Two Fold Bay is interesting to note.

The aggregate came from the local sandstone cliffs, the cement and sand being shipped in and landed at Bittangabee Bay. Stores for the complex continued to be landed here and transported along the timber tramway.

The tower was cement rendered both internally and externally. The tower was constructed with a blue stone gallery, with characteristic outward curving gunmetal railing, and a small room, originally designed as an oil store, attached to the western side. It stands 29 metres in height, from the base to the top of the lantern house, which accommodates the lantern constructed by Chance Bros of Birmingham. The lantern, a first order dioptic revolving light, flashed every minute and was visible for about nineteen nautical miles. A clockwork mechanism originally turned the light which was oil fired.

The Keeper's quarters and associated buildings were constructed to the west of the tower. The site was apparently levelled and retaining walls constructed along the back and fences also erected to enclose the tower and fences.

These quarters were described by Barnet in the Visitors book as being "commodious and comfortable", well ventilated with ten foot ceilings and provided with sufficiency of storage space. Constructed of brick, "cemented" externally and "plastered" internally. The hipped roofs were originally clad in galvanised iron on pine boardings. Wide verandahs run around the buildings. Each of the residences were provided with brick cemented rain water tanks.

The Head Keeper's cottage consisted of six rooms, one furnished for the an Inspecting Officer and detached kitchen and a store. The Assistant Keeper's cottages, semi detached residences, consisted of four rooms and a kitchen and store. Electric bells were connected to communicate between the lightroom in the tower and each of the quarters. Various outbuildings were also constructed.

Just prior to and during the establishment of the Lighthouse, a telegraph station was opened providing the first telegraphic communication from Green Cape to Sydney. It was established so that Sydney could be informed of the arrival of ships and provided an necessary link between Gabo Island and Eden.

In 1886 one memorable event was the wreck of the vessel LY-EE-MOON, on route to Sydney from Melbourne. The ship ran into rocks below the light and quickly broke up. Fifteen people survived the wreck with the Lighthouse Keeper's helping in the rescue, however approximately seventy lives were lost. Some
of the bodies of the dead were recovered and
buried in a small cemetery near the Lighthouse.

In his survey of coastal lights in 1913,
Commander Brewis recommended that the
speed of the flashes at Green Cape be
increased by inserting a new mechanism. The
original kerosene lamp was therefore altered at
this time and in 1926 the power of the light and
the speed of rotation was once again altered
according to Brewis' recommendations.

In 1962 the light was converted to electric
power and after two subsequent increases in
power, it was finally increased to 1,000,000
candela in 1967. In 1992 it was converted to
solar power and the old light was
decommissioned in favour of a new steel
framed latticework tower located further
towards the Point, which housed the light in a
fibreglass enclosure. The original lenses and
mechanics are still housed in the tower.

The lighthouse was automated in 1983 and has
most recently been used as a Bureau of
Meteorology weather reporting station via an
automatic weather station.

Some time since, corrugated steel roof
cladding was fixed to the quarters. It replaced
tiles which had replaced the original galvanised
iron roofing.

Since coming under the management of NPWS
public tours of the lighthouse site and tower
have been conducted. A caretaker most
recently has resided in the main cottage,
providing tours on 5 days a week basis and to
look after cleaning and security.
2.2 Description of the Setting

THE COASTAL EDGE

Green Cape is located along a coastal strip known as the “Sapphire Coast” which stretches from Bermagui to the Victorian border west to Brown Mountain and includes the Bega Valley and Eden. It is the half way point between Sydney and Melbourne.

From Bermagui to the Victorian border, areas of National Park which virtually span the length of coast particularly around Eden, protect some of the state's finest coastal scenery. From the jagged features of the Mimosa Rocks, Ben Boyd National Park and Nadgee Nature Reserve to the expansive beach areas of Bournda these parks offer a diverse variety of areas to see and enjoy.

Ben Boyd National Park was reserved in 1971 and forms part of network which protects the coastline of southern NSW. The Park was named after Benjamin Boyd, who played an important role in the early history and development of the area and is associated with other early settlers, the Imlay and Davidson families.

The southern coast near the Victorian border consists of the Nadgee Nature Reserve and Nadgee Wilderness. Visitation to the Nadgee Wilderness is strictly controlled and numbers are limited to 30 per night.

Ben Boyd Tower, Boydtown, the Davidson Whaling Station and Two, Fold Bay coupled with the recreational and fishing port activities at Eden are the major cultural and tourist attractions in the vicinity. They are complemented by the Eden Kilkr Whale Museum. Other tourism activities in the area include diving, fishing, bird watching, whale watching, walking, sea kayaking and surfing.

There is a walking track established along the coast between Green Cape and Ben Boyd. It joins the Great Coastal Walk being developed across the NSW Victorian border region, from Orbost to Merimbula.
THE HEADLAND

Green Cape headland is the most eastern point in the region. It extends out into Disaster Bay to its south and forms the south eastern tip of the Ben Boyd National Park, Southern Section.

From the Lighthouse all that can be seen is effectively wilderness and National Park with long stretches of coastal beaches. The access road from Eden passes through State forests and is maintained by both Council and NSW Forests before reaching the Park. The essentially forested backdrop disguises the gravel road leading into the Green Cape precinct, which is approximately 27 kilometres long and is reasonably well maintained for 2WD vehicles.

The Southern Section of the Park features a large expanse of heath which stretches back from the rocky headland below the Green Cape Lighthouse, gradually giving way to tall sclerophyll woodland. The heath features spectacular flowers and wattles, red bloodwoods and silver top ash dominate the woodlands. Tall stands of coastal banksia, rough barked Angophora and sunshine wattle grow shading a number of species. Commonly seen in the area grey kangaroos, swamp wallabies, red necked wallabies and goannas.

Green Cape is known for some of the best coastal game fishing in Australia. It is located near the junction of the Tasman Sea and Southern Ocean and the continental shelf is located quite close to the mainland. The Cape is also associated with whale watching.

The area of the headland around the lighthouse complex is characterised by cleared grassed areas defined by a boundary fence. The strict and trim landscape is consistent with the fire management regime.
ABORIGINAL RESOURCES

Two midden sites located on the headland have been recorded and registered with the NPWS (3-3-0054 and 3-3-0055). Local information suggests that many more sites are located on the headland but not recorded or registered.

THE LIGHTHOUSE PRECINCT

Green Cape Lighthouse and associated buildings are situated on 30.35 hectares of land adjoining Ben Boyd National Park south of Eden. The complex consists of eleven buildings, a cemetery with approximately sixty graves, old dump sites, a helipad, 1 kilometre old dirt road and a badly eroded carpark. The Lighthouse was decommissioned by AMSA in 1992 and replaced with a separate tower and light. The area of land with the new light and helipad is leased back to AMSA.

The Green Cape Lightstation, a tightly knit group of white painted masonry buildings, is located on the tip of the headland. It is dominated by the lighthouse tower and additional AMSA navigational aid tower which presides over the residences and associated functional structures such as the garages and former stables, the old telegraph station and the power house which retains its original purpose. The buildings are set out in a linear arrangement to the north of the tower.

The overall precinct includes Bittangabee Bay, where there are the remains of a shed and the original jetty, formerly connected to the Lighthouse complex by a tram line which was constructed to assist in the construction of the station.

A cemetery is dedicated to those who died in the LY-EE-MOON, which was wrecked just below the lighthouse three years after the light was first exhibited. There are a number of wreck sites in the vicinity.

There was also an old airstrip near the lighthouse which has long gone.

The area is a prime location to watch sea bird, marine mammals such as the permanent resident seals off the headland and the many whales that seasonally pass close to the mainland at this point.

The landscape is characterised by grassed areas defined by the boundary fences to the precinct. The site grading and works are the major disturbance on the site with the natural land forms and landscape reaffirming itself outside the fenceline. There is minor planting adjacent to the cottages.
ASSISTANT KEEPER'S COTTAGES

HEAD KEEPER'S COTTAGE

GREEN CAPE LIGHTHOUSE
FLOOR PLANS
(Source: 1993 AMSA Conservation Plan)
Not to Scale
Graham Brooks & Associates Pty. Ltd.
2.3

The Constructed Image

The Lighthouse complex consists of:

- The Light tower
- Head Keeper’s quarters
- Assistant Keeper’s cottages
- Other buildings and elements including generator building, garage, shed/carport, garage/workshop (former stables) and two store buildings used as flag locker and telegraph office.

There is a recently erected tall new navigational light tower to the south of the historic lighthouse tower. It is an open steel framed structure, painted white.

Other features include the former signal mast, various footings and walls, water tanks, quarry sites, automatic weather station, cemetery and memorial.

Various features also remain at Bittangabee Bay where a wharf was constructed. The remains include the ruins of a store shed, ruins of the jetty and evidence of a tramway.

THE LIGHTHOUSE TOWER

In 1992 AMSA erected a separate navigation aid tower to the south east of the lighthouse, releasing the lighthouse tower for use and its re-use for tourism opportunities. While the array remains, the light mechanism is no longer functional and the mercury bath has been drained.

The white concrete tower and lantern stands 29 metres high and is 44 metres above sea level. The tower is an octagonal form on a square base. It is rendered and painted and features a bluestone gallery which sits on sixteen painted bluestone corbels on the top of the tower.

The base of the tower is battered on the outside, the wall being four feet thick at the base tapering to two and half feet at the top. Attached to the base of the tower is a small oil store with a domed concrete roof. The entry to the tower is through a small common vestibule which also access the former oil store. The tower and former oil store both feature a number of small window openings.

The interior of the tower is divided into four storeys with cast iron floors and connected by cast iron stairs with iron handrails and balusters.

The lighthouse has been recently painted internally and externally to original colours.

The internal and external integrity of the lighthouse remains close to when it was constructed. The interior is intact with only small changes to the ground floor surfaces and joinery details. It is in good condition.
HEAD KEEPER'S COTTAGE

The Head Keeper's residence is a rendered brick house with detached service wing and hipped roof clad in corrugated steel. Brick chimneys are grouped symmetrically on the roofscape.

The Head Keeper's quarters generally retains its original internal layout. The main building features six rooms about a central corridor. The rear wing accommodates kitchen, bathroom and storage spaces. Part of the rear verandah has been infilled and enclosed.

The original detached service wing is now fully connected to the main section of the house by a verandah which surrounds the house. The verandah features concrete floors and skillion roof supported on chamfered timber posts with decorative timber brackets.

Conservation and adaption works by NPWS during 1998 have upgraded the kitchen, bathroom and laundry accommodation in the two Assistant Keepers' cottages. The work included the installation of new kitchen fittings and benches, rehanging a door, installation of a toilet cubicle in the former bathroom and new bath/shower. Floor and wall finishes were also upgraded.

OTHER BUILDINGS & ELEMENTS

The ancillary buildings such as the generator shed, the flag locker and the workshop/garage also retain a high degree of integrity.

The generator shed, located immediately behind the tower, is a small hipped and skillion roofed structure consisting of three sections. Constructed of rendered brick it also features a besser brick and separate fibro sheet clad additions. A small fibro clad detached structure containing toilet is located between the head keeper's quarters and the generator shed.

Two garage structures, one located north west of the Head Keeper's cottage and another located north west of the Assistant's residences, feature timber framed construction with fibro sheet cladding, concrete floor slab and gabled roof clad in corrugated fibro.

ASSISTANT KEEPER'S COTTAGES

The semi detached residences are similarly finished and detailed as the Head Keeper's residence. The building is also constructed of rendered brick and features encircling verandahs to the main block and detached service wing. The hipped roof, clad in corrugated steel, also features brick chimneys clustered symmetrically on the roofscape.

The principle change to the cottages during their service life had been the introduction of an opening in the central party wall to incorporate one of the front rooms from the western residence into the eastern residence. The original door opening from the hallway of the western residence was blocked to facilitate this.

Internal original finishes have generally retained a high degree of integrity and include beaded lining boards to the ceiling (in addition to some plasterboard and fibre cement sheeting), timber and concrete floors and slate fireplaces with cast iron grates and surrounding built in cupboards.

Conservation and adaption works by NPWS during 1998 have upgraded the kitchen,
skillion roofed sections clad in corrugated fibro.

The workshop/garage and former stables, located north west of the Assistant's residences, is constructed of painted rendered and ruled brickwork. It features a number of timber framed, multipaned double hung windows, tilt door, timber, split stable door and hipped roof clad in corrugated steel. The interior features concrete and timber floors, beaded ceiling lining boards and evidence of the original horse stalls.

The flag locker and signal mast are located north west of the complex of buildings. The ground level is slightly higher at this location and is separated from the complex clearing by an area of scrub vegetation. The flag locker itself is a concrete structure with ruled render and vaulted concrete roof. Internally the outline of the flag pigeon holes can still be seen. The signal mast has been dismantled.

The store and former telegraph station is also distanced from the main clearing and grouping of buildings. Constructed of rendered brickwork it is a rectangular shaped structure and features hipped roof clad in corrugated steel with simple single chimney, several window and door openings including a large opening with steel sheet door and concrete loading platform on its eastern face. The interior features several types of linings and concrete floor.

There are footings of a structure behind the former telegraph office. These may relate to the temporary prefabricated timber quarters for the telegraph operator.

The retaining wall at the rear of the residences are an original feature of the complex.

The LY-EE-MOON memorial cairn, cemetery and memorial all recall the diaster of 1886. The cairn was erected in 1986 near the site of the wreck and lists all of the names of those who died. There is apparently a great deal of wreckage scattered about the rocks of the Cape. Twenty four bodies from the wreck are buried in the cemetery. The plot is reached by foot from the main entrance road.

The quarry on the eastern side of the Cape below the lighthouse is still evident. This rock was crushed and used to form the aggregate for the concrete tower.
2.4

Significance

Green Cape is an outstanding and relatively intact example of a late Victorian Lighthouse complex located in an unspoilt and spectacular setting. It contains a fine lighthouse of unusual hexagonal geometry, which rises from a square base. Green Cape is part of a cohesive group of late 19th and early 20th century lighthouse in NSW each of which demonstrates the incremental changes in the design and construction of the various complexes.

It is an important and representative example of the so-called “coastal highway lighthouses” that were erected along the NSW coastline between 1862 and 1903.

HISTORIC SIGNIFICANCE

Green Cape Lighthouse was constructed during the most productive phase of Lighthouse construction in NSW during the early 1880s. It is an important component of the system of great 19th century lighthouses designed to light the NSW coastline, the so called “highway lights” in contrast to the harbour lights.

The decision to construct the lighthouse at Green Cape was taken as an integral part of plan to fill the more dangerous gaps in the Australian coastline, a decision that has its origins in a resolution of the Inter-Colonial Conference of 1873. The 1873 Conference is significant as the principle marine officers provided the first Australia wide evaluation of navigational needs.

Green Cape has a long association with coastal shipping and the economic development of the south coast. It is the most southern lighthouse in NSW.

The telegraph station also fulfilled an important link in the coastal communications.

AESTHETIC SIGNIFICANCE

Green Cape Lighthouse is significant for its unusual design and construction, on a prominent headland, possessing a tall tower, it has important landmark qualities. It was, at the time of its construction, the largest mass concrete structure constructed in NSW and is the tallest of three concrete lighthouses designed by James Barnet.

The tower features a distinctive architectural style and detailing, with its square base merging into an octagonal form, it is a break from the traditional circular towers found at many other lighthouses. The tower is significant as one of the most notable designs of James Barnet, for the heavily bracketed upper balcony, domed oil store and distinctive balcony railing, all of which are characteristic of Barnet's design. Similar design features, although in a variety of final compositions were used at Smoky Cape, Sugarloaf, Point Perpendicular and Barrenjoey.

The Green Cape Keepers' Cottages display the typical robustness of the Victorian Georgian style used extensively by the NSW Colonial Architect's office throughout the late 19th century. The buildings retain devices for tempering the effects of the exposed locations such as the corner windbreaks and screens to the verandahs and boundary walls. The residences are logically laid out with views to the tower and illustrate the hierarchy of the keepers.

The high degree of integrity of the elements of the lighthouse complex add to its significance. The tower and the residences form a cohesive group and are aesthetically pleasing in their design and layout.

SOCIAL SIGNIFICANCE

The wreck of the LY-EE-MOON in 1886, with the loss over seventy lives is one of Australia's gravest marine tragedies. The still visible wreckage and nearby cemetery emphasise the social significance of the area.

The Lighthouse complex operated for over 100 years and has also been associated with a number of local groups and the various Light Keeper's and their families.

SCIENTIFIC SIGNIFICANCE

The use and practice of concrete construction for lighthouse structures in Australia was initiated in NSW and the Green Cape Lighthouse is one of a pioneering group of concrete Lighthouses. It is significant as the construction incorporated materials readily available on the isolated site, with the local rock being crushed to form the aggregate for the concrete.

The Green Cape Lighthouse is of technological interest because of the faceted form chosen to
facilitate the pouring and forming of the concrete during construction.

There are a number of archaeological sites throughout the precinct and wider location that have the potential to yield additional information.

SIGNIFICANCE TO ABORIGINAL PEOPLE

The significance of this site for the local Aboriginal community is the headland on which the lighthouse sits and the coastal frontage and their long standing association with the area.

Christmas and holiday camps used to be held regularly on the headland but have been relocated to Batangary Bay over the last eight to ten years. The local community however would like to relocate back to the headland.

The area is currently used for fishing and shellfish collecting. Continuity of access and hunting and fishing rights is expected.

ELEMENTS OF PRIMARY AND CONTRIBUTORY SIGNIFICANCE

Grading the comparative significance of various elements or characteristics of an historic place or building is a useful management approach to support future programmes of detailed fabric or artefact conservation.

The majority of the conservation management plans prepared for AMSA included a graded table of significance for the various components of the lighthouse complexes, including landscape and archaeological features and of individual buildings.

The subsequent allocation of graded levels of significance in some of the CMPs is considered by this consultant to be overly complex and not beneficial in terms of providing a clear background to the conservation and management of building fabric or other elements.

The conclusions reached by the consultant team preparing this overall Conservation Management Plan have taken a different emphasis.

The characteristic considered to be the most important in relation to the NPWS Lighthouses is the manner in which they have evolved progressively while retaining their essential integrity and significant features. Accordingly a three tier significance rating has been adopted.

- Characteristics of Primary Significance
- Characteristics of Contributory Significance
- Characteristics of Little or No Significance.

Primary Significance:

All those elements and features that relate to the initial construction and operation of the particular Lighthouse and its supporting buildings and infrastructure. It includes the pre-existing topographical and landscape characteristics, initial cultural landscape features and sites of Aboriginal cultural significance.

Contributory Significance:

All those elements which relate to the subsequent use and development of the place as an operational Lighthouse, right down to the period when they were transferred to NPWS. It includes subsequent natural and cultural landscape features and post contact period sites and places of Aboriginal cultural significance.

Elements Of Little Or No Significance:

Generally only those items which relate to the subsequent re-use and development of the place after it was transferred to NPWS.
3.0 Constraints & Opportunities

This section confirms the listing status by various heritage agencies for the Green Cape Lighthouse and summarises the views of relevant community members or representatives.

Refer to the main Plan for guidance with regard to the appropriate responsibilities and actions to be taken in relation to these listings and viewpoints.

3.1 Heritage Recognition & Listing Status

NATIONAL AGENCIES

The Green Cape Lighthouse and Residences Group has been listed on the Register of the National Estate, administered by the Australian Heritage Commission.

AMSA retains operational use of the new tower, under the terms of the Heads of Agreement.

STATE AGENCIES

The primary conservation and management framework for the Lighthouse is the NSW National Parks and Wildlife Act. The site of the Lighthouse complex is not currently gazetted within the Ben Boyd National Park, but should be added to it. The Park is managed under the Ben Boyd National Park and Bellbird Creek National Park, Draft Plan of Management, February 1998. This will need to be amended in accordance with the recommendations of this Plan.

Green Cape Lighthouse is contained within the NPWS s170 Heritage and Conservation Register, under the NSW Heritage Act and Heritage Amendment Bill 1998.

Green Cape Lighthouse has been promoted by NPWS for listing in the State Heritage Register.

LOCAL GOVERNMENT

The Green Cape Lighthouse group is not listed as a heritage item in the Bega Valley Shire Council Local Environmental Plan.

Council however does recognise its heritage status and has not listed the complex as it is protected by Commonwealth and National Trust listings and now NPWS management and control.

NATIONAL TRUST OF AUSTRALIA (NSW)

The Green Cape Lighthouse Group is classified by the National Trust of Australia (NSW).

ABORIGINAL COMMUNITY

There are currently no Native Title claimant groups however the Eden LALC represents the local Aboriginal community.

It is also recognised that Eden LALC is not always representative of all local Aboriginal interests in the area and there is a need for consultation with the Yuin elders.

A local Aboriginal Cultural Centre called Monaroobobber Gudu Keeping Place is currently under construction near Eden and have plans of operating tours of the headland.

The local Aboriginal community is developing a cultural tourism plan centres on the Aboriginal Cultural Centre. The Lighthouse is included in a planned tour route, although this is yet to be formally discussed with NPWS.

Consultation with the Aboriginal community is presently informal but working towards more formal arrangements and the relationship is appreciated by the Aboriginal community. They want more direct involvement in the planning and management of the area. Major issues concern access and use of the land and hunting and fishing rights.

The community have expressed a desire for cooperative management of Ben Boyd National Park concerning land management, site protection, fishing rights, cultural tourism and community access. In addition they would appreciate more local Aboriginal employment.
LOCAL COMMUNITY

Green Cape Lighthouse is historically and architecturally significant and is important to the local community in that it provides a focal point and attraction for ecotourism in the area. However the Eden Tourist Guide makes scant reference to the Green Cape Lighthouse.

Eden is historically renowned for its fishing and whaling industry and the local community recognises this traditional association with the sea. Eden Killer Whale Museum is a popular tourist attraction operated by the local community. The Museum highlights the maritime history and associations of the area. The connection between the local community and the sea is also emphasised by the seaman’s Memorial Wall which was recently built by the townspeople in memory of the mariners who have been tragically lost at sea.

TOURISM OPERATORS

Discussions were held with Ian Baker, who with his business partner operate the Merimbula Airport and are the preferred tenderers for the lease of the Gabo Island lighthouse from National Parks Victoria.

His proposal indicated the commercial potential for the lighthouses, within a great deal of responsible management of the natural and cultural resources of Gabo Island. As he said so clearly, “It is in his best interest to achieve the long term sustainability of the very resources which are the primary attractions of the Island”.

In the short term they will fly passengers in a single engined fixed wing aircraft from Merimbula, around Green Cape and along the spectacular coastline to Gabo. After a light gourmet lunch, which comes in with the plane and is served by the pilot, the guests enjoy a 2 hour walk around the Island and the return flight to Merimbula. Total package price is $160.00 per person. Alternatively guests can stay overnight for a total cost of $220.00 per person.

Mr Baker indicated that there were obvious joint promotional opportunities between the southern NSW and Victorian lighthouses.

Gabo Island is established as a Crown Land Lease, but he is keen to keep Parks Victoria involved in the joint management of the environment on the Island.

Discussion with Michelle Robinson, who runs the Tourist Information Centre in Bega outlined the following points.

Cultural heritage is seen as an attraction in the south coast area but has not been promoted well enough. The natural features are the major attraction, with the villages, fishing ports, heritage places and crafts seen as added attractions.

Access and signage to Green Cape needs improvement.

There is funding available through NSW Tourism (Colin Bandsgrove 02 9931 1111) for promotional programmes that cover various regions. This could match well with the NPWS collective resource approach for all their lighthouses.

The local scenic flight operators always use the lighthouse as a highlight.

The most important aspect from her perspective, is the need to let the local and regional tourism information people know about the place. Many of the local information centres are run by volunteers, and yet they are the personal contact which most visitors will take advice from.

3.2 Conserving the Cultural Resources

THE CONDITION OF THE BUILDINGS & STRUCTURES

The lighthouse and associated buildings and structures are generally in good condition. Catch-up works undertaken by NPWS during 1998 have included internal upgrading of kitchens, bathrooms and laundries, replacement of decayed skirting boards, restoration of the light optic mechanism, internal and external painting, minor roof and rainwater system repairs, upgrading of the septic system and extensive weed eradication and feral animal control.

CULTURAL & NATURAL LANDSCAPES

The coastal zone, known as the “Sapphire Coast” features areas of National Park and State Forest which virtually span the length of
coast and protect some of the state's finest coastal scenery and natural landscapes.

The southern coast consists of the Nadgee Nature Reserve and Nadgee Wilderness. Visitation to the Nadgee Wilderness is strictly controlled with visitors attracted to the natural park attributes and to the fishing and abalone catching.

Ben Boyd Tower, Boydtown, the Davidson Whaling Station and Two Fold Bay coupled with the recreational and fishing port activities at Eden are the major cultural and tourist attractions in the coastal area. Various walking tracks connect the various areas and includes the Great Coastal Walk being developed across the NSW Victorian border region, from Orbost to Merimbula and features a number of these natural and cultural landscapes along its length.

From the Lighthouse all that can be seen is effectively wilderness and the natural landscapes of the National Park and long stretches of open beaches. The access road to the headland and Lighthouse Precinct from Eden passes through State forests and the essentially green cover and backdrop to the cultural features.

The natural landscape of the Cape also includes the surrounding waters popular for whale watching, to watch sea bird and marine mammals such as the permanent resident seals off the headland.

Green Cape Lighthouse and associated buildings forms a cultural landscape which has modified the former natural landscape of the headland. It consists of eleven buildings associated features and a cemetery. The overall precinct includes Bittangabee Beach, where there are the remains of a shed, the original jetty and timber tram line.

ABORIGINAL CULTURAL RESOURCES
Two midden sites located on the headland have been recorded and registered. Potential sites include additional middens, camps and contact sites which required further investigation.

The potential interpretive and research themes relating to the pre-historic occupation, site, land and sea use, fishing and Aboriginal whaling history and Christmas camps.

HISTORICAL ARCHAEOLOGICAL RESOURCES
The overall precinct includes great potential to yield information relating to the pre-use (telegraph station and whaling operations), initial construction and subsequent use and development of the Lighthouse complex. The cemetery and shipwreck site are significant.

Bittangabee Beach also contains archaeological evidence in the form of remains of a shed, the original jetty and timber tram line associated with the initial construction and subsequent use of the complex.

There was also an old airstrip near the lighthouse which has long gone.

The entire lighthouse precinct should be regarded as an area of high-archaeological sensitivity.

NAVIGATIONAL AIDS
The Lighthouse was decommissioned by AMSA in 1992 and replaced with a separate tower and light which is a primary navigational aid in the area. The area of land with the new light and helipad is leased back to and maintained by AMSA.

3.3 Other Management Issues

PRECINCT & SITE MANAGEMENT
The access road from Eden passes through State Forests and is maintained by both Council and Forests before reaching the Park. There is a dirt road of some 27 k into the Green Cape precinct. It is reasonably well maintained and is suitable for 2WD, but does not enjoy a good reputation among locals.

Since assuming management control, NPWS has been on preparing the place for future presentation and tourism use, including adapting the cottages for holiday accommodation.

Green Cape is operationally distant from the main centres of Park activities. There is a caretaker in the main cottage who is required to provide tours on 5 days per week and to look after cleaning, security and general site maintenance.
BUILDING CONSERVATION AND RE-USE ISSUES

The typical low key nature of the evolutionary development of the lighthouses and their associated cottages and support buildings is clearly evident at Green Cape. The buildings have retained the majority of their internal and external integrity, while absorbing technological change such as power, lighting, telephone and heating.

With the exception of the 1992 new navigation tower, the overall precinct has also changed very little from the initial settlement. The only new buildings in the precinct consist of garages in the vicinity of the cottages.

It is an essential conservation imperative that the existing highly significant character and integrity of the place be protected and conserved. Given the evolution of the place throughout the 20th century and the change of ownership to NPWS, that conservation shall be through adaption of the existing buildings, within programmes of interpretation and cultural tourism.

Green Cape Lighthouse presents a good and responsible opportunity to conserve the place in the same manner which is being recommended for other major lighthouses within the NPWS collection, including Cape Byron, Smoky Cape, Point Stephens, Hornby and Barrenjoey.

TOURISM MANAGEMENT ISSUES

The Sapphire Coast experiences about 400,000 tourists per year, many from Victoria into Merimbula. The population of 5,000 can swell to 40,000 in the peak season. 1998 was the best tourism season for about 10 years. There is some experience of Queenslanders and northern NSW people coming south for a quieter holiday. Merimbula has daily air services to both Melbourne and Sydney. Green Cape is known for some of the best land based game fishing in Australia. NPWS is active with BVSC and State Forests in promoting tourism to the region.

In January 1998, there were about 580 people who joined site tours, despite only low key promotion. This represented about half those who came to the precinct on day trips.

With the layout of the cottages, there is no fence across the frontage of the Head keeper's cottage, reducing the privacy of this building from any members of the public who move around that part of the precinct. The District staff have considered the introduction of a new pathway along the rear of the cottages to give a direct pedestrian link from the proposed new carpark to the lighthouse tower, without reducing the privacy of the caretaker who currently occupies the cottage.

The Assistant Keepers' cottages are set behind garden fences and within reasonable lawns, thereby achieving an acceptable level of privacy when they are used for holiday accommodation.

The concept of a separate pathway is not favoured, as it introduces a "back door" style entry to the precinct and minimises the visitor's appreciation of the cottages and the ability to interpret the lifestyles of the Keepers.

The recommended medium term reuse of the Head Keeper's cottage for a combination of site management, interpretation and visitor facilities will reduce the impact of visitors on the privacy of occupants.

There is a need for better signage about the lighthouse at the major road junctions on the journey in from the main road.

There also needs to be a greater level of promotion at the Eden Killer Whale Museum, since this appears to a good centre for tourism activity.

RECENT ACTIVITIES

The District has been conserving and adapting the buildings and the site in preparation for re-use and accommodation. The lighthouse tower has been recently painted both inside and out, to original colours.

The middle cottage is being fitted with a new kitchen and bathroom.

A contracted researcher has identified archival material for future interpretation programmes.

CURRENT OR MID TERM PROPOSALS

Installation of a sustainable and cost effective power system on site, to replace the temporary gas generators. This will require the removal of the two existing generators. These must not
be removed from site as they are important industrial archaeology relics.

Completion of the refurbishment of the kitchens and bathrooms in the two assistant keepers cottages to allow them to function as holiday accommodation.

Construction of a new carpark for 30 to 40 cars and 4 buses. Picnic tables will also be provided near the carpark.

Once these are completed there will be a concerted programme of promotion for holiday accommodation.

The timber paling fence between the assistants and main cottages will be reconstructed to reinforce privacy and the sense of a community of several families.

A section of the old flagpole has been rescued and returned to site. There are plans to reconstruct it in its original location. Such plans are consistent with the overall recommendations of this Plan.

Plans to upgrade safety features of the upper tower for tour parties, including the installation of an additional section of catwalk around the light array. This can be achieved without undue impact on significance.

The medium term objectives for the site include the maximisation of use of the two Assistant Keepers’ cottages for holiday accommodation. The site should also be achieving a reasonably high level of day visitor use, with guided tours up the tower.
4.0 Primary Conservation Policies for the Green Cape Lighthouse

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part D of the Conservation Management and Cultural Tourism Plan, the following primary policies establish the essential conservation framework for the Green Cape Lighthouse.

- The Green Cape Lighthouse shall be retained and managed by NPWS as a key contributing component of the overall NPWS Lighthouse Collection.

- The Conservation Policies and Implementation Guidelines contained in the overall Conservation Management and Cultural Tourism Plan shall be applied, as appropriate, to the Green Cape Lighthouse.

- NPWS shall gazette the Lighthouse site as part of the adjoining Ben Boyd National Park, in recognition of its complex cultural and natural significance.

- NPWS shall conserve and manage the lighthouse complex as a collection of fine historic buildings and supporting site features that clearly express its original functional role and which has gradually evolved since initial construction in response to progressively developed coastal navigation technology and organisational practices. Recognition and respect for the evolving development of the complex from 1883 until the mid 1990s shall form a key basis for conservation and management of the buildings, technology, artefacts, archaeological sites and infrastructure. Refer to Section 17.1 of the main CM&CTP for the Conservation Principles related to fabric, features and associated artefacts of differing significance.

- Conservation of the Green Cape Lighthouse shall protect, respect and where appropriate enhance the identified and closely interrelated characteristics of cultural and natural significance of the place, in its own right and as a component of a larger state, national and international network of late 19th and early 20th century lighthouses.

- All essential and outstanding catch-up repair and conservation works to the buildings and site elements shall be undertaken within a period of one year.

- The buildings and site elements shall be conserved by the implementation and long term continuation of a rigorous, cyclical and appropriate maintenance regime, starting immediately. This regime shall seek to maintain the buildings and site elements in a character and condition that equates to the time when the complex was an operating lighthouse facility, with a full time staff.

- NPWS shall conserve and manage the immediate site and setting as a modified natural landscape with important cultural landscape characteristics that clearly illustrate the development and occupation of the precinct as an operational lighthouse complex, from 1883 until the mid 1990s. There shall also be recognition of the other layers of cultural history on the headland, including public recreation.

- NPWS shall conserve and manage the wider Green Cape Headland as a modified natural landscape with cultural landscape features that illustrate the layers of human occupation and settlement, including that by Aboriginal people.

- NPWS shall conserve and manage the Aboriginal heritage characteristics of the Headland in consultation with the relevant representatives of the local Aboriginal communities.

- NPWS shall conserve and manage the complex and its setting in a manner which communicates and interprets the multi-layered nature of its cultural and natural significance to the general public.

- NPWS shall facilitate the on-going operation of the recently constructed lighthouse tower by AMSA as an operational navigation aid, within the framework of the Heads of Agreement between AMSA and the State of NSW.

- NPWS shall conserve and manage the complex by means of adapting the
interiors of the former cottages and support buildings to new uses which are identified in the site specific Interpretation and Tourism Plans and which are compatible with their evolved architectural and spatial characteristics and cultural significance.

- NPWS shall continue to conserve and manage the complex in the context of the Green Cape Headland being a popular destination and lookout venue for whale watching. Internal adaption of the cottages and support buildings shall support approved uses associated with site management, interpretation and cultural tourism.

- In the medium term, NPWS shall utilise the Head Keeper’s Cottage for a combination of site administration, interpretation, retail, food services and visitor facilities. Initially the Head Keeper’s Cottage shall accommodate a caretaker and some visitor facilities, in order to maintain an appropriate level of site security. The Assistant Keepers’ Cottages shall be used as short term equitable holiday accommodation.

- There shall be no new permanent buildings erected within the immediate Lighthouse precinct. Whilst permitted by the lease, the design and positioning of any future navigational equipment or energy source infrastructure shall be carefully considered to avoid or minimise any adverse impact on the heritage or visual characteristics of the overall lighthouse precinct.

- NPWS shall severely limit the number of visitors’ cars that are permitted to park within the immediate precinct of the Lighthouse cottages, to those that can be accommodated in the existing garages. All other cars shall be accommodated in the public carpark.

- NPWS shall conserve and manage the Green Cape Lighthouse in full recognition of the heritage and environmental management provisions of the relevant aims, objectives, standards and procedures of the Australian Heritage Commission, NSW Heritage Council, NSW EP&A Act, Regional and Local Environmental Plans, the National Trust of Australia (NSW), NPWS and good conservation practice as promoted by Australia ICOMOS.

- NPWS shall co-ordinate the marketing and promotion of interpretation and cultural tourism activities at the Green Cape Lighthouse, with the overall NPWS Lighthouses collective resource by reference to the Lighthouses Marketing and Promotions Unit within the Community Relations Division.
5.0
Site Specific Conservation Policy Implementation

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part E of the Conservation Management and Cultural Tourism Plan, the following guidelines establish the essential implementation framework for the Green Cape Lighthouse.

The Conservation Policy Implementation recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

These site specific recommendations are framed in the same categories as the Conservation Policies and Implementation Guidelines of the main Plan, for ease of cross reference.

5.1
Reference to Main CM&CT Plan

SHORT TERM

- Refer to the Conservation Policy and Implementation Sections of the main NPWS Lighthouses Conservation Management and Cultural Tourism Plan. All of the following policies and implementation recommendations should be read in association with the larger policy framework.

- Participate in the Service wide review and assessment of the CM&CTP.

MEDIUM TERM

- Give special regard to the NPWS management recommendations and other general policies contained in the CM&CTP. In this regard, ensure that close liaison is maintained with all relevant stakeholders, particularly those concerned with heritage management and tourism operations.

- Manage the site in accordance with general NPWS management policies and guidelines.

- Review and update the Ben Boyd National Park Plan of Management in accordance with the findings and recommendations of the final CM&CTP.

- Facilitate the co-ordination of the Green Cape Lighthouse conservation management and cultural tourism activities with the remainder of the NPWS collective resource. In particular contribute experiences and lessons to the other Lighthouse managers through the Lighthouse Reference Committee.

5.2
Aboriginal Heritage Conservation Policy Implementation

SHORT TERM

- Review the findings of recent Aboriginal site surveys and the previously collected knowledge.

- Review the current consultation processes with representatives of the Aboriginal community.

- Prepare medium term plans for undertaking further site surveys which will enhance the overall understanding of the Aboriginal cultural resources.

MEDIUM TERM

- Undertake additional research and site surveys to expand the knowledge of Aboriginal cultural resources.

- Refine and expand the consultation process, utilising an MOU, or other consultative mechanism with the local Aboriginal community, which also addresses issues of Aboriginal involvement in planning decisions.

- Maintain active liaison regarding any Native Title issues that may relate to the Headland and the Lighthouse precinct.

LONG TERM POLICIES
• Continue active consultation with the Aboriginal community to expand the understanding of their cultural heritage and involvement with the management and cultural tourism programmes at the Lighthouse and the headland generally.

5.4 Built Environment Conservation Policy Implementation

SHORT TERM

• Complete any outstanding components of the catch up repair programme.
• Replace internal flush panel doors in the Assistant Keepers' cottages with panel doors to match those elsewhere in the cottage.
• Replace missing sections of guttering and roof flashing to the cottages.

MEDIUM TERM

• Implement a rigorous building maintenance programme for the various buildings on the precinct.
• Replace the roof fixings with a more appropriate material.
• Facilitate the on-going maintenance of the new navigation tower by AMSA.

LONG TERM

• Ensure that a rigorous maintenance plan is implemented for all buildings.
• Repair or replace deteriorated elements of building fabric, generally by replacing like with like.

5.5 Historical Archaeology Policy Implementation

SHORT TERM

• Review known information regarding historical archaeological resources.
• Collect copies of relevant historical documentary material that may provide background research in future archaeological assessments.
• Ensure that the redundant generators are retained on site for future interpretation.
MEDIUM TERM

- Formulate an archaeological zoning plan for the Headland, taking particular note of the linkages to the remotely located early construction and supply sites, roadways etc from the operational period of the Lighthouse.

- Undertake additional archaeological assessments of areas with known potential, particularly if development or infrastructure proposals are under consideration.

LONG TERM

- Ensure that any archaeological management activities are undertaken in accordance with the NSW Heritage Act and Service policies.

5.6 Lighthouse Precinct Conservation Policy Implementation

SHORT TERM

- Continue current programmes of site management

- Ensure that existing levels of supervision and security are maintained

- Maintain rigorous rubbish management programmes.

MEDIUM TERM

- Continue to upgrade headland walking tracks.

- Monitor the number and flow of visitors cars and buses into the established car parking area, particularly in peak periods.

- Undertake the construction of a new car parking area, discretely located off the entry track, but taking into consideration impact on identified archaeological sites.

- Restrict visitor car access into the immediate precinct to those required for disabled drop-off or only during the evening after day visitors have departed.

- Progressively monitor site safety issues. Upgrade as required, after consideration of likely impact on significant characteristics.

- Review site security activities and consider the potential for maintaining security without the need for an on-site caretaker living in the Head Keeper’s cottage.

- Liaise with AMSA to ensure that the progressive introduction of new navigational technologies into the overall precinct does not negatively impact on the significant characteristics.

LONG TERM

- Reconstruct the flagpole.

- Avoid the construction of any new buildings within the Lighthouse precinct or in the visual curtilage established by the landscaped backdrop.

5.7 Building Adaption Policy Implementation

SHORT TERM

- Complete the upgrading of kitchens and bathrooms of the Assistant Keepers’ cottages for holiday accommodation.

- Complete any initial upgrading of the Head Keeper’s cottage for caretaker accommodation.

MEDIUM TERM

- Undertake the re-use of the Head Keeper’s cottage in a manner which would support the interpretation programmes and potential cultural tourism activities, including the range of interpretive, retail, food services, management support that is emerging as a successful direction for a number of the other NPWS Lighthouses.

- Re-use the small support buildings within the precinct for uses that are determined by the site specific Interpretation Plan.

- Prepare REFs, submit and gain approval for any new identified direction.
LONG TERM

- Ensure that any future building adaption programmes respect the architectural nature and spatial arrangements of the particular building.

- Ensure that any future programmes of reuse are undertaken in accordance with the recommendations of the site specific Interpretation Plan.

5.8 Interpretation Planning Implementation

SHORT TERM

- Co-operate in and contribute to the implementation of the NPWS Lighthouses Collective Resource Interpretation Plan.

- Consolidate relevant historical documentary and other material.

- Identify any likely subjects for oral history capture, from both the Aboriginal community and those who were part of the operational phase.

- Commission and implement a site specific Interpretation Plan, to be prepared within the framework of the NPWS Lighthouses Collective Resource Interpretation Plan.

- Determine and implement a preliminary interpretive signage programme which will not conflict with the full range of recommendations of the site specific Interpretation Plan.

MEDIUM TERM

- Implement the recommendations of the site specific Interpretation Plan.

- Implement oral history programmes.

- Implement image capture programmes.

- In accordance with the Interpretation Plan, supplement interpretive signage within the precinct.

- Provide interpretive displays in the rooms at the base of the Lighthouse tower.

- Periodically review and upgrade the site specific Interpretation Plan and interpretive activities.

5.9 Cultural Tourism Policy Implementation

SHORT TERM

- Continue the Discovery Ranger and other community support programmes for periods of peak visitation.

- Continue the tour operations offered by the caretakers.

- Continue preparations and open the Assistant Keepers’ cottages for holiday accommodation.

- Consolidate background information on visitor patterns and tourism opportunities for the Headland.

MEDIUM TERM

- Prepare a site specific tourism plan.

- Promote the limitation of overnight or long stay guest vehicle numbers on site, by severely limiting their parking area to the garages and the immediate vicinity of them, or in the less secure public carpark.

- Establish regular Lighthouse information and familiarisation programmes for the people who staff the Local Tourist Information Office.

- Facilitate cultural tourism linkages with the Eden Killer Whale Museum.

- Periodically review and amend any operator licences for the organised recreational activities that may take place on the Headland.

- Facilitate the incorporation of the nearby Twofold Bay and Ben Boyd Tower into
Lighthouse locality cultural tourism programmes.

LONG TERM

- Monitor cultural tourism programmes.
6.0

Bibliography


Australian Heritage Commission, Register of the National Estate Database, Location of Green Cape Lighthouse and Residences Group, Wonboyn Lake NSW, Database No: 001016, File No: 1/08/272/0013.


Loney, Jack, Wreck of the Ly-ee-Moon, Marine History Publications.


Supplementary Information

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Introduction

1.1
Relationship to main Conservation Management and Cultural Tourism Plan

This Supplementary Information on the Hornby Lighthouse and Inner South Head Keepers’ Cottages supports the NPWS Lighthouses Conservation Management and Cultural Plan. It provides site specific Building and Site Description Overview, with information and analysis to assist the relevant NPWS managers translate the findings and recommendations of the main Plan into the site specific issues.

The Lighthouse Keeper’s Quarters and Assistant Keepers’ Quarters are managed by NPWS. The Hornby Lighthouse Tower is managed by Sydney Ports Authority.

This Conservation Management and Cultural Tourism Plan and this Supplementary Information supersede the Head Lightkeeper's Cottage, Hornby Light, Inner South Head, Port Jackson, NSW Conservation Management Plan prepared by David Sheedy Pty Ltd for NPWS in May 1998.

In accordance with the project brief, the information contained in Section 2 of this Supplementary Information has been drawn from the NPWS Conservation Plan and supplemented by site inspections, but summarised and rearranged for consistency across the whole NPWS Lighthouses resource.

The information on Aboriginal heritage and its significance to Aboriginal people, is based on the research and discussions undertaken by Mary Dallas during the preparation of the main Plan.

The detailed historical background and building analysis contained in the NPWS Conservation Plan has been reproduced and is attached to this supplementary plan as reference material.
2.0 Understanding the Resource

2.1 Historical Background

ABORIGINAL MYTHOLOGY

The area was known to be occupied by the Guringai tribe. There are no mythological associations with the site however there are numerous middens, sheltered camp sites and engravings located on South Head and the adjacent coast as indication of past use and occupation.

EUROPEAN DISCOVERY & EARLY SETTLEMENT

Camp Cove is one of the most historic precincts of Sydney as Captain Arthur Phillip’s first landing place in Port Jackson.

From the early part of the 19th century, the headland was proposed as a military and defence installation. British Military authorities approved the plan for a battery of twenty five heavy guns at Inner South Head in 1853, a decision influenced by the fear of a Russian fleet attack on Sydney. The work was begun in 1854 however was subsequently abandoned the following year, under the direction of the newly appointed Governor Denison. The old convict constructed cobblestone access road remains as evidence of this period.

The construction of the Hornby light on the headland is a direct result of the loss of two ships, the DUNBAR and the CATHERINE ADAMSON both wrecked in 1857, with the loss of over 120 lives. The need for additional navigational aids was recognised and the small sandstone light was erected in 1858. Until this time the major navigational aid for ships entering the heads was from the Macquarie Light on the Outer South Head.

DEVELOPMENT OF THE LIGHTHOUSE

The new light was erected as an additional navigation aid to the earlier Macquarie Light, since that light was set at some distance from the entry to the Harbour. It was known as the Lower Light South Head, to distinguish it from Macquarie Light. The foundation stone was laid by Governor Denison who named the structure after his father-in-law, Admiral of the Blue, Commander in Chief of the British Pacific Fleet, Sir Phipps Hornby.

Hornby Light was designed by Colonial Architect, Alexander Dawson and was constructed of curved, dressed sandstone (now painted) with glass enclosed lantern house set thirty feet above ground level and surrounded by a delicate non-ferrous metal balcony and railing. The light was one purchased in 1853 and was described by the Colonial Architect as being first order catoptric light and was apparently first exhibited in June 1858.

The cottages, also designed by Alexander Dawson, with adjacent stone store rooms were constructed to the west of the light. The simple Victorian Georgian style cottages featured sandstone quarried from the surrounding cliffs. Each of the cottages had a small garden space surrounded by picket fences. Internally the major rooms featured fireplaces which were indicative of the Victorian period with coloured glazed tile lining and slate mantles and hearths.

One underground water tank and several iron tanks were provided for the storage of water for general use. Water from city mains was not connected until 1897.

In 1860 a notice was advertised for persons willing to contract for the construction of additional outbuildings at the Hornby Lighthouse. From that time it appears that a number of repairs were also carried out at the complex.

The assessment reports by David Sheedy and Wendy Thorp expressed doubt regarding the construction of the Head Keeper's cottage. It is not clear if the semi detached Assistant Keeper's cottages and Head Keeper's cottage were constructed at the same time. The "additional outbuildings" tendered for in 1860 entailed considerable cost. A painting by Conrad Martens dated 1859 shows only the Assistant's cottage adjacent to the Lighthouse which emphasises the view that the "outbuildings" were in fact the Head Keeper's cottage, service wing and possibly small stable and shed. Other returns and records can be said to confirm that the Head Keeper's cottage was constructed three years after the Assistant quarters.

The construction of the Second Battery on the headland in 1870, started the adjoining military
presence which continues today as HMAS Watson. Located further south of the cottages, it reflected the joint use of the headland for two strategic functions - safe navigation and defence. Timber picket fences were constructed around the lighthouse cottages in the following year.

In 1877 it appears that extensive additions were made to the cottages, the most significant being the addition of two room blocks to all of the cottages. The additions were designed and built under the supervision of the then Colonial Architect James Barnet and were most likely the result of the 1873 Conference of the Principal Officers of the Marine Department of the Australian Colonies. A number of repairs and alterations followed during the 1880s. In 1895 new eaves, gutters and downpipes were apparently added to the quarters.

In 1896 the lightning conductor was added to the top of the lantern room and the electric bells were put in order.

At the turn of the century a number of improvements to the cottages appear to be due to the administration of the Sydney Harbour Trust who assumed responsibility for the Lighthouses after 1900. The Trust was particularly concerned about public health after the ravages of the plague.

In 1902 new iron railings were installed on the gallery and stairs. In 1904 the original kerosene lamp was changed to incandescent gas in order to achieve a “much better light with less trouble and expense”.

1911 saw the introduction of the annual tour of inspections of lighthouse complexes by Commonwealth officers. The main cottage requirements were listed and included a new wash house with tubs, new bath, four ventilator gratings, two new traps for drains, locks and sash cords. The Assistant’s quarters requiring window glass, tubs and sinks for the wash house, repairs to the wash house, locks, sash cords and lengths of gas piping.

The 1913 report by CRW Brewis described the Hornby light as “old and obsolete” and referred to land slips which had affected the footing of the light. It also reported that at this time two keepers manned the light with an assistant keeper for relieving duties. The report also stated that the Hornby light had lost its importance due to the light located at Grotto Point, however was still in use as a Harbour light guiding vessels close to shore.

The light was connected to electricity in 1933 and the Lighthouse Keepers were withdrawn in the same year. In 1948 the reflectors and lamps were removed and a single cataodic lense was installed. The beacon was given an oscillating characteristic and lens which was manufactured by the Chance Bros and was originally installed in the light ship BRAMBLE built in 1877, moored off the Sow and Pigs shoal. From here the lens was then transferred and installed in the light tower at Shark Island where it served until a smaller lens was available before being transferred to Hornby Light.

Immediately after the withdrawal of Lighthouse staff in 1933, the Army asked that the cottages and surrounding land be transferred to their ownership in exchange for defence land at Fort Scratchley. The State Government finally rejected the offer and from Army records it appears that the cottages were let to private tenants from 1933 to 1939. In 1939 it appears the Army took temporary possession of the buildings for defence purposes.

The Army, who controlled much of the land on the Harbour foreshores during and subsequent to both World Wars, consolidated the defences of the Harbour with the addition of more fortifications on South Head as part of what was known as Fortress Sydney. With the danger of renewed conflict the Hornby Battery was formed containing three 68 pound guns and ten 8 inch coastal artillery guns mounted 100 feet above high water mark. The garrison has since been dismantled.

The Head Keepers cottage was by 1938 in poor state of repair and was almost demolished however the need for additional accommodation saved it. It was probably in the 1940s that works were carried out to improve all of the residences, used by the Army for married personnel, until they vacated in 1977.

In 1975 the National Trust of Australia (NSW) classified the site. NPWS moved into the cottage as caretakers of the precinct when the army vacated. In 1984 the asbestos cement roofing which had replaced the earlier slates was replaced with corrugated steel.

The high timber paling fence that surrounded the Head Keeper’s Cottage was removed in the early 1990s, as it was located very close to the cliff top to the west of the cottage and was a posing a danger to pedestrians.
In 1997 works to the Head Keeper's cottage included replacement of the corrugated steel with slates, reconstruction of the verandahs and all joinery was repaired. The external renovations also included revealing the face stonework. The internal restoration is still to be completed. The Assistant's cottages roofs were also reslated during 1998 and minor internal redecorating completed.

NPWS has also undertaking ground and revegetation works around the Precinct.
2.2 Description of the Setting

THE COASTAL EDGE

Hornby Lighthouse is located at South Head which forms the southern entrance of Port Jackson and Sydney Harbour. The majority of Inner South Head is part of the Sydney Harbour National Park, although the actual Hornby Lighthouse tower is not gazetted as part of the Park. To the south the coastal topography consists of rocky cliff and formations including Gap Bluff and The Gap at Watsons Bay.

The headland curves around into Port Jackson, its western edge featuring a number of outcrops framing small beaches, Lady Bay and Camp Cove Watsons Bay. Watsons Bay is a notable harbourside location enjoyed by Sydneysiders and tourists alike. A ferry service connects the Bay area to other eastern suburb locations and the City of Sydney.

The vegetation is typical of native coastal heath with substantial plantings of native shrubs and trees, located around the military complex.

Gap Bluff is a well known tourist destination attracting many Australian and international visitors and featuring spectacular views and history and is also part of the Sydney Harbour National Park.

Watsons Bay features a number of restaurants, cafes and the local Hotel commands a prime location on the waterfront.

Across the Harbour, west and to the north west is Middle Head and Georges Heights. Middle Head also features a Military installation surrounded by National Park, which provides a view of the Harbour and South Head.

To the north, North Head defines the northern entrance to Sydney Harbour and provides excellent views back to the city and of the Lighthouse complex on South Head. North Head includes the Old Quarantine Station, which is part of the Sydney Harbour National Park and surrounds another prime Military complex.

North Head is bounded by steep, rocky cliffs which curve around the headland forming into Manly Cove on the western side and curving around into Cabbage Tree Bay and the famous Manly Beach on the eastern side. The northern coastline features a number of Sydney’s ocean beaches interspersed by rocky headlands and outcrops continuing north to Barrenjoey.
THE HEADLAND

The headland is an important component of Sydney Harbour National Park (SHNP), an unusual compilation of headlands, island and other natural features surrounding and defining the Harbour. There has been a long relationship between much of the land currently within the SHNP and the defensive history of the Harbour. Many of the components of the Park were former defence lands.

The visual curtilage extends across to high cliffs of North Head and the Quarantine Station, into Manly and Fairlight, across to Middle Head and Georges Heights and back into the Harbour towards the city. Circular Quay and the Opera House are obscured by Bradleys Head, but the location is one of the most spectacular lookout points in Sydney Harbour. It is a very popular "grandstand" for major events on the Harbour, particularly the start of the Sydney to Hobart Yacht Race.

The headland is accessed by a set of timber stairs and a footpath which from extends Camp Cove along a coastal/ Harbour strip. The former Constable's Cottage is located on NPWS estate, as part of Sydney Harbour National Park, in the vicinity of the Camp Cove entry to the Precinct. The most significant historical and landscape element here is the old cobblestone road alignment. Lady Bay Beach, a well known nudist beach, is included in this coastal strip. This section of the Harbour coastline is a popular walking venue and there is a well formed walking track along the cliff top. Toilets are provided in this area, which is accessible by road from Camp Cove and Watsons Bay through Service estate.

To the south, the remainder of South Head is dominated by the military base HMAS Watson, which flanks the southern edge of the lighthouse precinct. The only access road for vehicles to the Lighthouse Precinct is through the military base. Access is therefore limited and depends on making prior arrangements with the military.

The landscape continues the theme established on South Head. The native heath predominates with minor weed infestations surrounding some settlement areas. Grasses are also present.
ABORIGINAL RESOURCES

There are a number of middens, sheltered camp sites and engravings located on South Head and the adjacent coast. Eighteen middens and camp sites and engravings have been recorded on the NPWS Register for the area around the Lighthouse. (5-6-0096; 5-6-0713-00716; 5-6-0723-4; 5-6-0733; 5-6-0918-0922; 5-6-1517-19 And 5-6-1665-6)

THE LIGHTHOUSE PRECINCT

The Hornby Light and associated cottages, particularly the Head Keeper’s cottage, are very prominent visual features at the entrance into Sydney Harbour and are equally visible from the ferries enroute to Manly.

The Lighthouse precinct actually comprises of the lighthouse (1858) located at the far eastern point of the headland, and Assistant Keeper’s semi detached residences, set close to the lighthouse tower and the Head Keeper’s cottage (extended 1878) set some distance away to its west. This is an unusual arrangement of buildings in the NSW context and perhaps reflects both the spectacular site, the twenty year difference in construction dates of the structures and the work of two Colonial Architects, Dawson and Barnet.

The Assistant’s cottages are set in a fenced enclosure, providing privacy for the residents. The main cottage differs from the usual Barnet style Head Keeper’s cottages of the later Lighthouses, being a little smaller, was erected in two major stages and has two outbuildings to the immediate south, connected by verandahs. The building is constructed of face stonework and features a slate roof. It originally was surrounded by a paling fence, but this was removed by NPWS in recent years to give a better view of the house from the Harbour and to encourage people to come closer to the building, now that there has been a change in use. The house is located adjacent to the walking path along the coastal cliff edge.

There are 19th century and World War Two defence installations in the immediate vicinity of the Head Keeper’s Cottage and the Hornby tower, including observation bunkers, gun emplacements and underground magazines. These installations are key components of the larger Sydney Fortress story and the whole history of the defence of Sydney Harbour from 1788 to 1940s. Another set of gun emplacements faces into Camp Cove and the Harbour, from the rear of the headland.

The Service has undertaken widespread bush regeneration around the headland. This work is quite recent and has yet to develop into maturity. The general precinct appears well managed and is a pleasant place for passive recreation and viewing the Harbour entrance.

There is some low key interpretive signage around the precinct. There are no toilets or retail outlets in the lighthouse precinct although excellent public toilets are provided on the approach walking track. A Council owned kiosk is located on Camp Cove beach at the commencement of the walk.

The visual curtilage of the precinct encompasses the whole entrance to Sydney Harbour. Hornby Light is set on a low headland that extends round from South Head.
HORNBURY LIGHTHOUSE
INNER SOUTH HEAD
FLOOR PLANS
(Source: Sheedy, 1998 Conservation Plan)
Not to Scale
Graham Brooks & Associates Pty. Ltd.
2.3
The Constructed Image

The Hornby Lighthouse group comprises:

- Hornby Lighthouse
- Head Keeper's cottage
- Assistant Keeper's cottages

However Hornby Lighthouse is not managed by NPWS.

THE LIGHTHOUSE TOWER

Although not owned or managed by NPWS, the lighthouse tower remains as an important navigational aid. Situated on the eastern edge of the headland it stands twenty-five feet high from ground to floor of lantern externally painted in red and white stripes. The sandstone tower is circular in plan and ten feet in diameter with walls of two and half feet thick at the base and one and a half feet thick at the top.

The tower is divided into two floors, the lower floor originally used as an oil store and a first floor which is accessed via a set of external stone stairs which curves around the southern half of the structure. An inner, iron staircase extends from the first floor level to the floor of the lantern. The floors were apparently constructed of timber and the walls were dressed sandstone. The gallery round is stone with an iron railing.

The Hornby Light appears to be in good condition. It appears to have been painted in distinctive stripes from as early as the 1860s.

HEAD KEEPER'S COTTAGE

The Head Keeper's cottage is a small L shaped sandstone building constructed in two major stages, with hipped roof featuring two sandstone chimney, louvred gabelts on the main ridge and is clad in slates. It is located at the western point of the precinct with open verandah on its north and western facades with spectacular views to North Head and the Harbour.

The main structure now consists of six rooms about a corridor which directly accesses four of these rooms. It appears that the cottage as originally constructed (c.1860) featured four rooms with detached service wing at the rear.
In 1877 two additional sitting rooms were constructed to the west of the original cottage connected to the original section by an internal corridor. As a result the verandahs were also constructed in two stages and have been subsequently rebuilt in 1997.

A covered walkway extends from the south eastern corner of the building to a small service building also constructed in face sandstone with simple hipped slate clad roof. The service building also features a simple sandstone chimney and a skillion roofed section on its northern side. It consists of two rooms, the former kitchen and store room.

The main house was in poor condition, having been closed and not used until quite recently. NPWS has expended considerable effort in conserving the external features of the building, including a new slate roof, new verandahs and new internal and external joinery. The openings however remain boarded until a new use is confirmed, to prevent vandalism.

Internally the building has received no conservation works other than simple protection. Plans have been prepared by David Sheedy for internal conservation and upgrading but have yet to be implemented.

There are a number of elements located in the vicinity of the cottage including channels, sumps and galleys located on the eastern side adjacent to the covered way connecting to the service wing. These were noted on a drawing of the building dated 1902.

A small panel of relatively modern timber paling fence with adjacent gate posts are located adjacent to the service wing and a small area of sandstone paving remains to the south west of the service wing, possibly the floor of the carriage house and stable. To the east of the cottage are the remains of a dry stone retaining wall and the possible location of an old quarry.

A concrete circular base for the timber flagstaff also remains in the vicinity of the cottage. A concrete road extends to the cottage, rebuilt c.1940 by the Army it follows the approximate line of the original road.

**ASSISTANT KEEPER’S COTTAGES**

The two Assistant Keeper’s semi detached cottages are located immediately west of the Lighthouse tower in their own enclosure being surrounded by timber fence. The concrete circuit path which extends from Camp Cove around the precinct passes between the fenced yard and the tower.

The Assistants’ cottages are symmetrical about a common party wall. They each essentially feature six rooms which frame an enclosed verandah. Constructed of sandstone the cottages have been painted externally and feature hipped and skillion roof sections with two gablets on the main ridgeline. The hipped main roof changing pitch over the former open verandah. Three chimneys punctuate the roofline which until very recently was clad in corrugated iron. A current project on the building is replacing the iron with slates to match the Head Keeper’s cottage and reconstructed the earlier form of the roof, including reconstruction of chimneys and reroofing in slate.

Internally the cottages are in reasonable condition. There is some rising damp along the common party wall and in some walls, particularly of the western cottage.

Some works were carried out to the building subsequent to an inspection and report from 1911. These appear to have included lining many of the internal ceilings with fibrous plaster and battens. It is not clear exactly when the verandahs were infilled, however works were carried out during the 1940s when the Army used the building for residences for married service personnel. The internal bathroom enclosures, some new window sashes and installation of some internal wall lining with sheet fibro, appear to date from this period.

Recent internal refurbishment has included repainting, cement render wall repairs and new flooring in some rooms.

**GUN EMLACEMENTS & FORTIFICATIONS**

The remains of a gun battery started in 1854 and abandoned in 1855 is located north of the Head Keeper’s cottage.

A WW2 observation bunker is located directly in front of the Hornby light. This concrete structure is currently in poor condition and can
be considered as visually intrusive due to its close proximity to the tower.

It is however an integral part of the defence system in the precinct and of important cultural heritage value.

There are number of concrete footings and remains around the precinct.
2.4 Significance

The Hornby Lighthouse cottages are significant as the oldest in the NPWS collection and the associated Lighthouse Tower is also significant among the group being the only 19th Century Harbour light, constructed to supplement the existing "highway" function of the Macquarie Light.

While Hornby Lighthouse was not a component of the so called “coastal highway lighthouses” that were erected along the NSW coastline between 1862 and 1903, it is the oldest lighthouse in the sites managed within the NPWS collection, although not owned by NPWS and the only harbour light dating from the 19th century.

The Inner South Head Lighthouse Keepers’ Cottages are unique in the NPWS context, being the oldest and the only set which underwent major alterations and additions during their service life.

HISTORIC SIGNIFICANCE

The Hornby Light (1858) is one of the oldest extant lighthouses in New South Wales and one of the oldest in Australia. It is a prominent and picturesque landmark with long historic associations in connection with the operation and management of the Port of Sydney and with important organisations such as the Colonial architects, office, Army and military network and NPWS.

The cottages are the oldest cottages in the NPWS collection and the only example within the collection, where the cottages underwent major expansion during their service life. It is the only example among the NPWS group where the Head Keeper’s cottage is located further away from the Lighthouse Tower.

The cottages remain as surviving evidence of the remote lifestyle and operational life of the Lighthouse Keepers during the 19th century.

The fortifications on the headland are significant and relate to the military history and defence of the Harbour and City of Sydney from the mid 19th century to World War Two. The Lighthouse complex has continuously operated in tandem with military operations located on the headland and has also provided at times additional facilities for the Military base.

AESTHETIC SIGNIFICANCE

The dramatic setting of the complex, on the extreme southern headland and entry to Port Jackson, holds a strongly evocative landmark quality visible from a number of vantage points around the Harbour and those passing through the Heads or on the journey between the City and Manly.

The cottages are fine survivors of Alexander Dawson’s Lighthouse cottage work and typical for their type. The buildings are also associated with James Barnet who carried out alterations and additions and subsequently used the group to model later complexes on the NSW coast.

SOCIAL SIGNIFICANCE

The complex is now considered as important features of SHNF and forms the focal point of the headland appreciated by many local, national and international visitors on land and also from the Harbour and other headlands.

The site is significant to a number of groups including the Aboriginal community, former lighthouse keepers and military personnel who have a close association with the complex.

SCIENTIFIC SIGNIFICANCE

The cottages are the oldest surviving group on the coast of NSW and demonstrate the living conditions and accommodation provided for the early Lighthouse Keepers and their families during the late 19th and early 20th century.

The defence sites and evidence of cobblestone roadway are important archaeological sites within the overall precinct.

SIGNIFICANCE TO ABORIGINAL PEOPLE

The significance of this site for the local Aboriginal community relates to the land on which the lighthouse and cottages sit and not the buildings themselves. It appears to be mostly an economic significance.
ELEMENTS OF PRIMARY AND CONTRIBUTORY SIGNIFICANCE

Grading the comparative significance of various elements or characteristics of an historic place or building is a useful management approach to support future programmes of detailed fabric or artefact conservation.

The majority of the conservation management plans prepared for AMSA included a graded table of significance for the various components of the lighthouse complexes, including landscape and archaeological features and of individual buildings.

The subsequent allocation of graded levels of significance in some of the CMPs is considered by this consultant to be overly complex and not beneficial in terms of providing a clear background to the conservation and management of building fabric or other elements.

The conclusions reached by the consultant team preparing this overall Conservation Management Plan have taken a different emphasis.

The characteristic considered to be the most important in relation to the NPWS Lighthouses is the manner in which they have evolved progressively while retaining their essential integrity and significant features. Accordingly a three tier significance rating has been adopted.

- Characteristics of Primary Significance
- Characteristics of Contributory Significance
- Characteristics of Little or No Significance.

Primary Significance:

All those elements and features that relate to the initial construction and operation of the particular Lighthouse and its supporting buildings and infrastructure. It includes the pre-existing topographical and landscape characteristics, initial cultural landscape features and sites of Aboriginal cultural significance.

Contributory Significance:

All those elements which relate to the subsequent use and development of the place as an operational Lighthouse, right down to the period when they were transferred to NPWS or other relevant agencies such as Australian Property Group (South Solitary Island) or the Cape Byron Headland Trust. It includes subsequent natural and cultural landscape features and post contact period sites and places of Aboriginal cultural significance.

Elements Of Little Or No Significance:

Generally only those items which relate to the subsequent re-use and development of the place after it was transferred to NPWS.
3.0 Constraints & Opportunities

This section confirms the listing status by various heritage agencies for the Hornby Lighthouse and cottages. It summarises the views of relevant community members or representatives.

Refer to the main Plan for guidance with regard to the appropriate responsibilities and actions to be taken in relation to these listings and viewpoints.

3.1 Heritage Recognition & Listing Status

NATIONAL AGENCIES

The Hornby Lighthouse group has been listed on the Register of the National Estate, administered by the Australian Heritage Commission.

STATE AGENCIES

The primary conservation and management framework for the Lighthouse is the NSW National Parks and Wildlife Act. The Keepers Quarters and immediate precinct but not the Lighthouse tower are currently gazetted within the Sydney Harbour National Park. The Park is managed under the Sydney Harbour National Park Draft Plan of Management, January 1996. This will need to be amended in accordance with the recommendations of this Plan.

Hornby Lighthouse Group has not been listed as an item in the SREP No.23 for Sydney & Middle Harbour, however it was recognised as a “landmark lighthouse” in a natural setting and recommends that heath vegetation on the headland could be intensified and that additional tree planting in the area is appropriate.

The Hornby Lighthouse cottages are contained within the NPWS s170 Heritage and Conservation Register, under the NSW Heritage Act and Heritage Amendment Bill 1998.

Hornby Lighthouse cottages have been promoted by NPWS for listing in the State Heritage Register.

LOCAL GOVERNMENT

The Hornby Lighthouse group has been listed as heritage items on the Woollahra Municipal Council Local Environmental Plan 1995.

NATIONAL TRUST OF AUSTRALIA (NSW)

The Hornby Lighthouse group has been classified by the National Trust of Australia (NSW).

ABORIGINAL COMMUNITY

South Head is associated with a number of Aboriginal communities.

The Native Title claims are on behalf of the Darug people, whose claim includes Crown Land in greater metropolitan Sydney including the lighthouse, and on behalf of the Eora people, whose claim includes southern metropolitan Sydney including South Head and the lighthouse.

Older members of the La Perouse community were consulted regarding the place, however no special importance was placed on the lighthouse, they are interested in the site management of the area.

Consultation with the Aboriginal community is presently informal but there appears to be some confusion regarding who to consult. While this portion of SHNP is within La Perouse LALC boundaries the Sydney Harbour National Park Draft Plan of Management refers to the Metropolitan LALC as the appropriate group to consult. This aspect required further investigation. The area is traditionally thought to be the land of the Eora people of Sydney, the La Perouse people have more interest and connections with the Dharawal tribe in Sydney and many other groups along the NSW coast.

The LALC would like to see consistent consultative processes throughout the Land Council area, including a 50/50 partnership management of the Park concerning land management, site protection, cultural tourism and community access. They also would the management style to remain informal but the management structure to be reviewed and based on a Memorandum of Understanding.

There is at present no community use, however there future interest in guided tours including bush tucker and history tours is expected.
LOCAL COMMUNITY

Access to the site is presently pedestrian from Watsons Bay and Camp Cove which is an exclusive residential and military area. No pedestrian and virtually no vehicular access is available through the military complex adjoining the Lighthouse Precinct. There may be concern about excessive numbers on the Headland in peak periods.

In addition a small community of nudist bathers at Lady Bay have expressed concern as the pedestrian path to the Lighthouse complex passes the beach area and encourages overlooking. NPWS and Lighthouse signage at Camp Cove has been continuously vandalised.

There may be the need for additional community consultation and discussion regarding the parking, general security and bush regeneration in the area.

There are local community groups, such as at groups who are interested in the natural and cultural scenic qualities and have expressed interest in the use of the site or cottages for location classes and tuition.

TOURISM OPERATORS

Watsons Bay and the Gap are clearly popular tourist and local destinations. The combinations of the natural and scenic qualities with the number of fine and famous food and beverage outlets is clearly the reason for the great attraction.

Currently both vehicular and water borne traffic highlight the area, with both private and public transport and tour operators making their way to Watsons Bay. At present access to the Lighthouse precinct is by foot.

Tours are currently conducted by NPWS especially during the school holidays and on request.

3.2
Conserving the Cultural Resources

THE CONDITION OF THE BUILDINGS & STRUCTURES

The Lighthouse and cottages are generally in reasonable condition.

The exterior of the lighthouse tower requires repainting and general maintenance to the external metalwork. This is not the responsibility of NPWS.

The Head Keeper’s cottage has recently undergone work to restore or reconstruct the exterior features to conserve them. The works have included a new slate roof, external stone conservation, new verandah posts and roofing. The external presentation is excellent, although the building is still boarded up in anticipation of adaption works to the interiors. The external joinery to windows and doors has been partially repaired but has not been reglazed or repainted at this stage.

The interiors have not received any conservation works to date. Timber floor structures appear relatively sound, although some flooring is in poor condition. Internal wall and ceiling finishes are in dilapidated state, with peeling paint to the plastered walls and ceilings. All internal joinery, including fire surrounds, doors and architraves and kitchen fittings are either in poor condition or missing. A number of salvaged joinery items are currently stored in the building, awaiting conservation works.

The Assistant Keeper’s cottages currently accommodate NPWS staff. They are in reasonable condition internally and externally, having undergone some conservation works in early 1998. These works included reconstruction of the original external roof profile and reslatting, external painting and the reconstruction of some secondary chimney stacks.

Internally the cottages are in reasonable condition, although rising damp in the party walls and in several other places continues to be a problem. It appears from discussions with one of the Rangers that no adequate attempt was made to resolve the rising damp at the time of the 1998 internal works. These works included render repairs to several internal walls in the bedrooms, replacement of timber flooring in one bedroom and internal painting. No renovation works was undertaken to the
kitchen or bathroom areas, all of which appear to date from the 1940s or 50s. The major building conservation issue with these cottages is the way they are built into the sloping topography. This raises the difficulty of preventing water ingress into some of the southern walls.

There is some concern over the condition and public safety of some of the WW2 military bunker installations. The concrete structure adjacent to the Lighthouse in particular is in poor condition and is a public safety risk. There are presently signs warning the public not to enter the structure.

CULTURAL & NATURAL LANDSCAPES

The immediate coastal zone retains a balance of natural and cultural and developed elements. The headlands themselves retain their distinctive rock formations and outcrops and most feature vegetation, visually enveloping the development within those areas. The adjoining seascape is a dominant natural feature however also features relatively busy and constant traffic and flow of sea craft between the heads and within the entrance area of Port Jackson.

Initial European settlement in Australia centred on Sydney Harbour and SHNP contains a number of places associated with important aspects of the country’s development. These include the role and contributions of the convicts, the development of systems of fortifications to protect the colony and navigation and maritime measures on the Harbour all aspects relative to the use and development of South Head.

The headland zone at South Head has been modified and cleared allowing the cultural elements, the Lighthouse and various military installations to stand out. Even from a distance the cultural aspects are clearly evident. The headland zone does feature natural elements, the walk to the Lighthouse complex passes through sections of bush and passes beautiful beaches, however the developed areas are constantly visible as a backdrop. The residences along Camp Cove beach and the fencing and built up nature of the adjacent military establishment are part of the overall headland experience, reminders of the proximity of this location to the city.

The Lighthouse zone is largely modified, the cultural elements tending to dominate the area. Considerable bush regeneration has been undertaken.

ABORIGINAL CULTURAL RESOURCES

There are a number of recorded sites on the headland and adjacent coastal areas and potentially more sites including middens, camp and engravings. Some archaeological surveys have been conducted however further research is required. In particular more comprehensive survey is required in the immediate vicinity of the Lighthouse, access roads and walking trails. There are known engravings in these areas.

There are a number of potential interpretive and research themes associated with the site including pre-historic occupation, land and sea use, bush tucker and local archaeology.

HISTORICAL ARCHAEOLOGICAL RESOURCES

The Lighthouse Precinct has the potential to yield information related to the initial construction of the complex and subsequent use and development of the area through the surviving archaeological material. It should be regarded as an area of high archaeological sensitivity.

In addition to the Lighthouse aspects there is considerable material relating to the Military use and association with the headland which spans pre-Lighthouse to the present. Camp Cove is one of the most historic precincts of Sydney. The convict built cobblestone access road is of considerable significance and adds another dimension to the place which can contribute to the overall story of the headland.

NAVIGATIONAL AIDS

The lighthouse tower remains as an important navigational aid and continues to be under the management and maintenance of the Sydney Ports Corporation.

3.3 Other Management Issues

PRECINCT & SITE MANAGEMENT

The visual curtilage of the precinct encompasses the whole entrance to Sydney Harbour. It extends across to high cliffs of
North Head and the Quarantine Station, into Manly and Fairlight, across to Middle Head and Georges Heights and back into the Harbour towards the city. The location would have to be one of the most spectacular lookout points in Sydney Harbour.

The main issue for re-use is the limitation on unscheduled vehicle access to the Lighthouse precinct, through HMAS Watson, the adjacent military base. Without this reliability, it is likely that all re-use options must be based on either pedestrian access from Watsons Bay, in the first instance.

HMAS Watson borders the southern edge of the lighthouse precinct. The only access road for vehicles to the lighthouse precinct is through the base. NPWS currently have an arrangement for essential access for NPWS management purposes. Casual vehicle access is not possible nor desirable. NPWS acknowledge the co-operation of the base commander in this regard. In addition, if there is a major activity on the base, access can be denied for an extended period.

There is no continuation of the coastal walk from Inner South Head to South Head across the cliff top edge of the military base.

The WW2 defence installations in the immediate vicinity of Hornby Light, including observation bunkers, gun emplacements and underground magazines are a key component of the larger World War Two, Fortress Sydney story and the whole history of the defence of Sydney Harbour from 1788 until the 1940s.

The retention of the observation bunker, which is set directly in front of the Hornby Light, in poor condition and can be considered as visually intrusive to the lighthouse tower, is an issue. It is however an integral part of the defensive system, which forms the other major cultural theme of the headland and should be preserved for interpretation.

Inner South Head is a very popular “grandstand” for major events on the Harbour, particularly the annual Sydney Hobart Yacht Race departure on Boxing Day. NPWS has commissioned aerial photographs of the headland crowds on these days to assess visitor numbers and behaviour.

Conversely the Hornby Light and the cottages, particularly the Head Keepers Cottage, are very prominent visual features at the entrance into Sydney Harbour and are equally visible from the ferries plying the route to Manly.

There seems to be some resistance from the patrons of Lady Bay beach to the retention of effective signage on the path to the headland since this encourages more pedestrian use of the path and voyeurism.

There is some low key interpretative signage around the precinct.

BUILDING CONSERVATION & RE-USE

Given its location and relatively remote access, the preferred direction for re-use is to accept uses that focus on daylight hours. Overnight uses are not considered to be appropriate.

The Head Keeper’s cottage is located adjacent to the walking path along the coastal cliff edge which may have implications on the reuse with privacy and security concerns. The enclosing timber paling fence was demolished several years ago by NPWS, but an earlier picket fence could be used to establish a new level of visitor management if required.

The two Assistant Keepers’ houses are currently used by Service staff, performing a caretaker and security function.

The feasibility of re-using the Assistant Keepers' houses as holiday accommodation is not viable since no private vehicle access is permissible through the adjoining military base. All supplies and visitor support must be taken in by foot. In addition there is no pedestrian lighting along the coastal walk and no provision for emergency services after hours.

Conservation and re-use of the cottages should be undertaken in consideration of their high level of cultural significance and the potential for them to make that significance accessible to the public within cultural tourism programmes. They are also an important component of the NPWS Lighthouses collection and consideration should be given to managing and presenting their significance in a manner which is co-ordinated with the other lighthouses.

Accordingly the preferred conservation and re-use direction for the cottages is as a combination of site management, interpretation, retail and visitor services, including food outlet in the Head Keeper’s Cottage and short stay residential...
accommodation in the Assistants' Cottages. The buildings are too important to be locked into a form of exclusive re-use that discourages public access.

TOURISM MANAGEMENT ISSUES

The lighthouse tower remains as an important navigational aid. Access for tour parties into the tower is not possible, from a NPWS perspective, since the Service does not currently control the tower. In a curious way, this lack of access is not perceived to be as important a loss of visitor experience potential as is the case with other more isolated towers. The Hornby Light is not very tall and is set well down on the headland.

Unlike the nearby Macquarie Light or other coastal lights, Hornby performs a mainly Harbour safety function. It does not have the same connection with "the edge of the world" for the majority of visitors as do the NPWS Lighthouses elsewhere along the coast.

As with so many of the lighthouses which might provide an accommodation re-use opportunity, access to the cottages for guests is a problem. Achieving an agreement for unrestricted casual access by private motor vehicle through the military base is highly unlikely and could not be guaranteed on an ongoing basis. An alternative is to leave the guests cars at Watsons Bay or in a secure parking lot on the edge of the Park and walk into the cottages. This may be a negative factor for some. To others it can be packaged into the total experience. Guests are free to walk around to Camp Cove and Watsons Bay at any time during their stay.

There is currently no attempt to staff the headland precinct with ranger or field office personnel on a regular basis to meet and greet or undertake tours. Interpretation is by passive signage and the strength of the setting is enough of an attraction. Many tours are given on request and during peak periods.

There is some signage directing visitors to the headland at Camp Cove, however vandalism of the signage is a continuing problem.

There are no toilets or retail outlets in the lighthouse precinct, although public toilets, which are frequently vandalised, are provided on the approach walking track. A Council owned kiosk concession is available, on the nearby Camp Cove beach, at the commencement of the walk.

A problem exists with the immediate access from Camp Cove beach up to the walking trail. There is a set of timber steps and very poor drainage, that make access difficult and impossible for the disabled. An alternative access across the frontage of the adjacent Service owned Constables Cottage could relieve this problem.

There appears to be some resistance from the patrons of the nude beach to the retention of effective signage on the path to the headland, since this would encourage more pedestrian use of the cliff-top walk and voyeurism.

Major Harbour events can be used as opportunities to promote public appreciation of the natural and cultural values of the area, natural and cultural heritage conservation and the work of the Service in general.

RECENT ACTIVITIES

- Conservation and extensive reconstruction of the Head Keepers Cottage.
- Re-roofing of the Assistant Keeper's cottages with slate.
- Bush regeneration along the walking track from Camp Cove.
4.0 Primary Conservation Policies for the Hornby Lighthouse Cottages

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part D of the Conservation Management and Cultural Tourism Plan, the following primary policies establish the essential conservation framework for the Hornby Lighthouse Cottages at Inner South Head.

- The Hornby Lighthouse Cottages at Inner South Head shall be retained and managed by NPWS as a key contributing component of the overall NPWS Lighthouse Collection.

- NPWS shall consider acquiring the Hornby Lighthouse tower and gazetting it into the Sydney Harbour National Park, in order to gain full management control over the most visible and expressive lighthouse element on the headland and to bring it into full management as part of the collective resource. In this context, the current responsibility for the navigational light would remain with Sydney Ports Corporation.

- The Conservation Policies and Implementation Guidelines contained in the overall Conservation Management and Cultural Tourism Plan shall be applied, as appropriate, to the Hornby Lighthouse Cottages and precinct.

- NPWS shall continue to manage the Lighthouse precinct as part of the Sydney Harbour National Park, in recognition of its complex cultural and natural significance.

- NPWS shall conserve and manage the lighthouse complex as a collection of fine historic buildings and supporting site features that clearly express its original functional role and which has gradually evolved since initial construction in response to progressively developed coastal navigation technology and organisational practices. Recognition and respect for the evolving development of the complex from 1858 until the mid 1990s shall form a key basis for conservation and management of the buildings, technology, artefacts, archaeological sites and infrastructure. Refer to Section 17.1 of the main CM&CTP for the Conservation Principles related to fabric, features and associated artefacts of differing significance.

- Conservation of the Hornby Lighthouse Cottages and precinct shall protect, respect and where appropriate enhance the identified and closely interrelated characteristics of cultural and natural significance of the place, in its own right and as a component of a larger state, national and international network of late 19th and early 20th century lighthouses.

- All essential and outstanding catch-up repair and conservation works to the buildings and site elements shall be undertaken within a period of one year.

- The buildings and site elements shall be conserved by the implementation and long term continuation of a rigorous, cyclical and appropriate maintenance regime, starting immediately. This regime shall seek to maintain the buildings and site elements in a character and condition that equates to the time when the complex was an operating lighthouse facility, with a full time staff.

- NPWS shall conserve and manage the immediate site and setting as a modified natural landscape with important cultural landscape characteristics that clearly illustrate the development and occupation of the precinct as an operational lighthouse complex, from 1858 until the mid 1990s. There shall also be recognition of the other layers of cultural history on the headland, including the defence activities and public recreation.

- NPWS shall conserve and manage the wider Inner South Head Headland as a modified natural landscape with cultural landscape features that illustrate the layers of human occupation and settlement, including that by Aboriginal people.

- NPWS shall conserve and manage the Aboriginal heritage characteristics of the Headland in consultation with the relevant representatives of the local Aboriginal communities.
NPWS shall conserve and manage the complex and its setting in a manner which communicates and interprets the multi-layered nature of its cultural and natural significance to the general public.

NPWS shall facilitate the on-going operation of the lighthouse tower by Sydney Ports Corporation as an operational navigation aid, within the framework of the existing agreements.

NPWS shall conserve and manage the complex by means of adapting the interiors of the former cottages and support buildings to new uses which are identified in the site specific Interpretation and Tourism Plans and which are compatible with their evolved architectural and spatial characteristics and cultural significance.

NPWS shall continue to conserve and manage the complex in the context of Inner South Head being a popular tourism destination and lookout venue. Internal adaption of the cottages and support buildings shall support approved uses associated with site management, interpretation and cultural tourism.

NPWS shall utilise the Head Keeper's Cottage for a combination of site administration, interpretation, retail, food services and visitor facilities. The Assistant Keepers' Cottages shall be reused as short term equitable holiday accommodation.

There shall be no new permanent buildings erected within the immediate Lighthouse precinct. The design and positioning of any future navigational equipment or energy source infrastructure shall be carefully considered to avoid or minimise any adverse impact on the heritage or visual characteristics of the overall lighthouse precinct.

NPWS shall severely limit the number of cars that are permitted to access the immediate precinct of the Lighthouse cottages to Service vehicles and those providing servicing support to the approved re-use opportunities. NPWS shall continue to liaise with HMAS Watson to secure reasonable and well managed occasional vehicle access to the Lighthouse precinct. All other cars shall be accommodated in the nearby public carparks.

NPWS shall conserve and manage the Hornby Lighthouse Cottages at Inner South Head in full recognition of the heritage and environmental management provisions of the relevant aims, objectives, standards and procedures of the Australian Heritage Commission, NSW Heritage Council, NSW EP&A Act, Regional and Local Environmental Plans, the National Trust of Australia (NSW), NPWS and good conservation practice as promoted by Australia ICOMOS.

NPWS shall co-ordinate the marketing and promotion of interpretation and cultural tourism activities at the Hornby Lighthouse and Cottages, with the overall NPWS Lighthouses collective resource by reference to the Lighthouses Marketing and Promotions Unit within the Community Relations Division.
5.0 Site Specific Conservation Policy Implementation

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part E of the Conservation Management and Cultural Tourism Plan, the following guidelines establish the essential implementation framework for the Hornby Lighthouse Cottages and precinct.

The Conservation Policy Implementation recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

These site specific recommendations are framed in the same categories as the Conservation Policies and Implementation Guidelines of the main Plan, for ease of cross reference.

5.1 Reference to Main CM&CT Plan

SHORT TERM

- Refer to the Conservation Policy and Implementation Sections of the main NPWS Lighthouses Conservation Management and Cultural Tourism Plan. All of the following policies and implementation recommendations should be read in association with the larger policy framework.

- Participate in the Service wide review and assessment of the CM&CTP.

MEDIUM TERM

- Give special regard to the NPWS management recommendations and other general policies contained in the CM&CTP. In this regard, ensure that close liaison is maintained with all relevant stakeholders, particularly those concerned with heritage management and tourism operations.

- Manage the site in accordance with general NPWS management policies and guidelines.

- Review and update the Sydney Harbour National Park Plan of Management in accordance with the findings and recommendations of the final CM&CTP.

- Facilitate the co-ordination of the Hornby Lighthouse cottages conservation management and cultural tourism activities with the remainder of the NPWS collective resource. In particular contribute experiences and lessons to the other Lighthouse managers through the Lighthouse Reference Committee.

5.2 Aboriginal Heritage Conservation Policy Implementation

SHORT TERM

- Review the findings of recent Aboriginal site surveys and the previously collected knowledge.

- Review the current consultation processes with representatives of the Aboriginal community.

- Prepare medium term plans for undertaking further site surveys which will enhance the overall understanding of the Aboriginal cultural resources.

MEDIUM TERM

- Undertake additional research and site surveys to expand the knowledge of Aboriginal cultural resources.

- Refine and expand the consultation process, utilising an MOU with the local Aboriginal community. The consultative process should also address issues of Aboriginal involvement in planning decisions.

- Maintain active liaison regarding any Native Title issues that may relate to the Headland and the Lighthouse precinct.

LONG TERM

- Continue active consultation with the Aboriginal community to expand the
understanding of their cultural heritage and involvement with the management and cultural tourism programmes at the Lighthouse and the headland generally.

- Protect and conserve known archaeological sites into the long term

5.3 Landscape Conservation Policy Implementation

SHORT TERM

- Complete any outstanding components of the current landscape regeneration programme.

- Continue weed management programmes.

- Continue existing fire management regimes as appropriate.

- Continue landscape management of the cottage gardens.

MEDIUM TERM

- Review and prepare an inventory of the important natural and cultural landscape features of the Headland and the Lighthouse precinct, which must be protected into the longer term.

- Ensure that appropriate Aboriginal and historical archaeological research is undertaken before any major landscape management programmes are commenced.

- Complete any outstanding landscape and vegetation surveys of the headland

- Review the pathway to the Lighthouse precinct as part of this plan.

- Prepare a landscape management plan and incorporate its findings into the overall management plan for the precinct.

- Undertake landscape and weed management programmes on a cyclical basis.

LONG TERM

- Periodically review the landscape and weed management plan and upgrade as necessary.

5.4 Built Environment Conservation Policy Implementation

SHORT TERM

- Complete any outstanding components of the catch up repair programme.

MEDIUM TERM

- Undertake a widespread conservation programme for the two Assistant Keepers' cottages.

- Complete the internal upgrading of the Head Keeper's cottage and attached outbuilding.

- Implement a rigorous building maintenance programme for the various buildings on the precinct.

- Facilitate the on-going maintenance of the Lighthouse Tower by Sydney Ports Corporation.

LONG TERM

- Ensure that a rigorous maintenance plan is implemented for all buildings.

- Repair or replace deteriorated elements of building fabric, generally by replacing like with like.

5.5 Historical Archaeology Policy Implementation

SHORT TERM

- Review known information regarding historical archaeological resources.

- Collect copies of relevant historical documentary material that may provide background research in future archaeological assessments.

MEDIUM TERM

- Undertake an upgraded documentary assessment of the defence sites on the headland to provide additional information for the zoning and interpretation plans.
• Formulate an archaeological zoning plan for the Headland, taking particular note of the 19th century and WW2 defence sites, gun emplacements and the colonial period cobblestone road.

• Undertake additional archaeological assessments of areas with known potential, particularly if development or infrastructure proposals are under consideration.

LONG TERM

• Ensure that any archaeological management activities are undertaken in accordance with the NSW Heritage Act and Service policies.

5.6 Lighthouse Precinct Conservation Policy Implementation

SHORT TERM

• Continue current programmes of site management

• Complete the upgrading of the pedestrian pathway entry in the immediate vicinity of the Constable’s cottage or from the beach frontage.

• Ensure that existing levels of supervision and security are maintained

• Maintain rigorous rubbish management programmes.

MEDIUM TERM

• Reconstruct the low timber picket fences around the Head Keeper’s cottage.

• Ensure that the fences to the Assistant Keepers’ cottages are maintained in order to achieve an appropriate level of privacy for the current and future uses.

• Maintain headland walking tracks and public toilet facilities.

• Monitor the number and flow of visitors particularly in peak periods.

• Restrict visitor vehicle access into the immediate precinct to Service vehicles or those with special approval.

• Maintain the former carparking area as a long term re-use facility.

• Continue to maintain good relations with the adjacent military establishment regarding all aspects of precinct management and access.

• Progressively monitor site safety issues. Upgrade as required, after consideration of likely impact on significant characteristics.

• Review site security activities and consider the potential for maintaining security without the need for an onsite caretakers or Service personnel living in the Assistant Keepers’ cottages.

• Liaise with Sydney Ports Corporation to ensure that the progressive introduction of new navigational technologies into the overall precinct does not negatively impact on the significant characteristics.

• Conserve all of the defence related elements on the headland, including the bunker at the foot of the Lighthouse tower, to illustrate the important layered significance of the place.

LONG TERM

• Reconstruct the flagpole.

• Avoid the construction of any new buildings within the Lighthouse precinct or in the visual curtilage along the cliff top walking track.

• Avoid extending the current roadway, which provides access to the main toilet block, further into the precinct.

5.7 Building Adaptation Policy Implementation

SHORT TERM

• Complete the initial upgrading of the Head Keeper’s cottage for appropriate leased uses and as recommended by the site specific interpretation plan.

MEDIUM TERM

• Given the significance of the cottages and
their proximity to the large Sydney populace, review the currently proposed use of the Head Keeper's cottage in relation to additional opportunities that may be identified in site specific interpretation plan and agreed cultural tourism activities.

- Undertake an impact assessment for the re-use of the Head Keeper's cottage to ensure support the interpretation programmes and potential cultural tourism activities. The examination should include adapting the cottage to provide the range of interpretive, retail, food services, management support that is emerging as a successful direction for a number of the other NPWS Lighthouses.

- Conduct a similar feasibility study for the re-use of the Assistant Keepers' cottages as packaged short term holiday accommodation.

- Review the findings and recommendations of the studies with the full range of stakeholders.

- Prepare REFs, submit and gain approval for any new identified direction.

- Upgrade the kitchens, bathrooms and general facilities of the Assistant Keepers' cottages as required for future use.

LONG TERM

- Ensure that any future building adaption programmes respect the architectural nature and spatial arrangements of the particular building.

- Ensure that any future programmes of re-use are undertaken in accordance with the recommendations of the site specific Interpretation Plan.

5.8 Interpretation Planning Implementation

SHORT TERM

- Co-operate in and contribute to the implementation of the NPWS Lighthouses Collective Resource Interpretation Plan.

- Consolidate relevant historical documentary and other material.

- Identify any likely subjects for oral history capture, from both the Aboriginal community and those who were part of the operational Lighthouse and defence phases.

- Commission and implement a site specific Interpretation Plan, to be prepared within the framework of the NPWS Lighthouses Collective Resource Interpretation Plan.

- Upgrade the preliminary interpretive signage programme in a manner which will not conflict with the full range of recommendations of the site specific Interpretation Plan.

MEDIUM TERM

- Implement the recommendations of the site specific Interpretation Plan.

- Implement oral history programmes.

- Implement image capture programmes.

- In accordance with the Interpretation Plan, supplement interpretive signage in the precinct.

LONG TERM

- Periodically review and upgrade the site specific Interpretation Plan and interpretive activities.

5.9 Cultural Tourism Policy Implementation

SHORT TERM

- Continue the Discovery Ranger and other community support programmes for periods of peak visitation.

- Consolidate background information on visitor patterns and tourism opportunities for the Headland.

MEDIUM TERM

- Prepare a site specific tourism plan.

- Improve Lighthouse related signage in the precinct and the adjacent areas of Watsons
Bay.
- Liaise with Sydney bus, ferry and other recreational or public transport providers, to improve the level of information available for tourists and visitors.

- Liaise with Harbour cruise operators to provide additional interpretive information for their passengers about the Lighthouse and the defensive fortifications on Inner South Head.

- Establish regular Lighthouse information and familiarisation programmes for the people who staff any local Tourist Information outlets.

**LONG TERM**

- Monitor cultural tourism programmes.
6.0

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1.0 Introduction

1.1 Relationship to main Conservation Management and Cultural Tourism Plan

This Supplementary Information on the Montague Island Lighthouse supports the NPWS Lighthouses Conservation Management and Cultural Plan. It provides site specific Building and Site Description Overview, with information and analysis to assist the relevant NPWS managers translate the findings and recommendations of the main Plan into the site specific issues.

This Conservation Management and Cultural Tourism Plan and this Supplementary Information supersede the Montague Island Conservation Plan prepared for NPWS in 1993.

In accordance with the project brief, the information contained in Section 2 of this Supplementary Information has been drawn from the NPWS Conservation Plan but summarised and rearranged for consistency across the whole NPWS Lighthouses resource.

The information on Aboriginal heritage and its significance to Aboriginal people, is based on the research and discussions undertaken by Mary Dallas during the preparation of the main Plan.

The detailed historical background and building analysis contained in the NPWS Conservation Plan has been reproduced and is attached to this supplementary plan as reference material.
2.0 Understanding the Resource

2.1 Historical Background

ABORIGINAL MYTHOLOGY

The Island is associated with the Yuin Nation tribal group, being hunting grounds for the Walbanja and Djiringangji and relates to the a creation story mythology.

Gulaga (Mount Dromedary) had two sons who travelled to the coast. The youngest, Najanuga was called back from the sea and became Little Dromedary while the older of the two sons, Barunguba went on into the sea and became the Island.

Barunguba, as the Island was known, was a fertile hunting ground and has been associated with seasonal hunting for various birds, eggs, penguins and seals. The various tribes would go to the Island in their bark canoes.

The island apparently attracted the Wogonga people who travelled in considerable numbers to the island, by stringybark canoes, for the seasonal hunting of mutton bird and their eggs and seal. Legend has it that an estimated 150 Wogongas drowned in the early 1800s returning from one of these hunting expeditions.

EUROPEAN DISCOVERY & EARLY SETTLEMENT

In 1770 Captain James Cook sailed along the NSW coast. In his journal he described a camel shaped mountain which he called Mt Dromedary. Cook failed to see the Island due to his distance from the coast and believed that it was a headland.

In 1790 the convict ship SURPRISE, established that Montague was an Island during an inshore trip along the coast. It is possible that the Island was named after George Montague Dunk, Earl of Halifax.

Little is known of the pre-lighthouse history of the Island. During the mid nineteenth century a gold rush at Nerrigundah, about 10 kilometres north of Narooma, resulted in the establishment of a small village on Punkalla Creek at the head of Wogonga Inlet. It seems that sea bird eggs were collected from Montague to sell to the miners.

Several fishing shacks were believed to exist on the western shore of the Island, however no substantial structures were built and there are no remains. Site plans dated 1883 show a number of huts on the Island however these probably relate to the construction of the Lighthouse.

DEVELOPMENT OF THE Lighthouse

In the Lighthouse Visitors book, James Barnet wrote that the initiation of the lighthouse dates from 1873 when a recommendation was made for the construction of a lighthouse on Montague (formerly Montagu) Island by a “Conference of the Principle Officers of the Marine Departments of the Australian Colonies” chaired by Captain Hixson. It was not until 1877 however that the NSW Government finally provided the necessary funds.

Barnet writes that after a visit to the Island to ascertain the best location for the light, plans were prepared and tenders invited in October 1878. The initial contractor, J Musson, defaulted on the contract and in 1880 a second contractor, WH Jennings, took over the project and completed it ahead of schedule.

The lighthouse, designed by James Barnet was officially exhibited on November 1, 1881. Its erection coming a little late for the collier, the LADY DARLING which was wrecked on a reef just south of the Island in 1880.

The tower was constructed from granite quarried on the Island, a large granite boulder providing the foundations. The tapering walls of the tower stand about twelve metres from base to the upper platform which supports the lantern. The lantern was manufactured by Chance Bros of Birmingham. Around the upper platform is a gently curved balustrade made of gunmetal.

The light originally featured a fixed and flashing mechanism which has was upgraded in 1910, 1931 and in 1969 when the light was converted from oil to electricity. The original lens and pedestal were removed and are now located at the Narooma Visitors Centre Museum. The light is now solar powered.
The residences consisting of Head Keeper’s cottage and semi detached cottages for the two Assistants and their families were constructed of rendered brick. Barnet described them as “commodious and comfortably furnished” with “lofty” eleven foot ceilings. The hipped roofs were originally clad in iron on pine boarding which was replaced in 1901-02 to tiles. In 1959 the tiles were replaced with corrugated asbestos.

Each residence featured large verandahs with the characteristic corner windbreaks and has simple timber detailing and posts. Each also featured a paved rear courtyard enclosed by the detached service wings of the buildings with kitchen, laundry and store areas also constructed of rendered brick and underground water tanks gathered water for the complex.

The irregularity of the weather hampered the supply of provisions and mail from the outset. Keepers and their families had to rely on their own means and this lead to the early establishment of the gardens and fowl runs.

The isolation of the light-house is emphasised by the graves of Charles Townsend and the two Burgess children. These deaths might not have occurred had better communications and assistance been more available. It seems that steamers often did not see or ignored distress signals, a cable or a signal station was not supplied to the Island. In the mid 1890s it is recorded that a telephone link with Narooma was required.

After some debate and lapse of time a radio transceiver with pedal generator was supplied in January 1939. This system also had its problems and telephones finally arrived with electrification in 1950 however it is not known if this was linked to the mainland or was only within the complex.

In 1933 big game fishing began in Australia when a black marlin was caught off Montague Island. Several fishing shacks dating from the 1930s are believed to have existed on the western shore of the Island however no evidence remains.

During World War Two the Royal Australian Navy operated a defence facility on the Island.
The footings of the two timber and fibro huts are located to the north of the lighthouse and may be associated with submarine detection research.

The lighthouse buildings were re-roofed during the 1950s. The asbestos roof was installed, replacing the original heavy duty corrugated iron and second of unglazed terra cotta tiles. It appears that the overall roof profile was simplified with the main roof taken directly over the verandahs, however it is not known if the old verandah roof framing was left under the new profile.

In 1953 the Island became a wildlife sanctuary under the control of the National Trust of Australia (NSW) making Montague the first official Trust "property" in Australia. Members of the National Trust were regular visitors to the Island from 1950s onwards, as were scientists from the CSIRO from the 1960s. The first scientific visit to the Island was by an amateur ornithologist, AF Basset Hull in 1907. Throughout these visits lighthouse operations continued. Manning of the lighthouse continued until 1985. Montague remained staffed as it was deemed that the benefits derived from human presence were greater than the cost savings of automating the lighthouse.

In 1987, after full automation of the lighthouse, management of the Island, together with the Lighthouse cottages and other support buildings, was transferred to the NSW National Parks and Wildlife Service. The Department of Transport retained the lighthouse tower as an operating navigational aid. In the following year the Service conducted limited day tours to the Island in conjunction with Heritage Week. These tours were so popular that similar tours were conducted during the 1989/90 holiday period. The trial period proved successful and expressions of interest were sought to provide passenger service to the Island.

In 1990 the Island was dedicated as a Nature Reserve. Following Maritime Services Board lifting of restrictions and approval to conduct night passenger carrying operations across the Narooma Bar in 1991, evening tours of the Island began. A Conservation Plan by NPWS guided the initial conservation works.

By June 1993 a major works maintenance programme was completed involving repairs to the lighthouse cottages and associated historic facilities. The programme comprised of nine individual projects including:

- Roof and gutter repairs.
- Kitchen renovations
- Aerial mast purchase and installation.
- Rising damp and floor restoration.
- Track and quarry stabilisation.
- Restoration carpentry.
- Painting of the lighthouse and facilities.
- Stabilisation works to the graves.
- Infrastructure upgrades, including plumbing and water systems.

These works were completed by local contractors and NPWS staff, the overall aim being to conserve, protect, restore and repair the lighthouse fabric and associated facilities. Since that time NPWS have been involved in the ongoing use and management of the Island. More recently, one of the Assistant Keeper’s cottages has been returned to its 1881 condition, a process that dealt with issues such as rising damp, loss of mortar in walls, dry rot, inadequate wiring and plumbing alterations, poor plastering and the general deterioration of the building fabric.

Since NPWS have taken management responsibility for Montague Island, the use of the place has expanded from the single management purpose of lightkeeping to a multi purpose use that includes:

- Accommodation for the permanent staff NPWS officer and family.
- A research base and accommodation for selected University and CSIRO research officers.
- Accommodation for NPWS restoration, maintenance and project staff.
- Sales outlet and refreshment facility for guided tour groups.
- House museum/1881 “museum in the making” precinct.
- Weather recording and communications precinct.

The Lighthouse tower remains as an operating navigational aid operated by AMSA on a lease back arrangement under the Heads of Agreement between AMSA and the State of NSW.
2.2 Description of the Setting

THE COASTAL EDGE

Montague Island is located approximately 9 kilometres off shore from Narooma and is the largest inshore island on the NSW coast. Access by boat is governed by the sea conditions at the Narooma Bar and limited to about two days in every three.

The Island covers eighty two hectares and consists of two elevated halves divided by a ravine and is orientated on a north south axis. It once formed the northern headland of a low isthmus extending from Cape Dromedary and was eventually isolated when sea levels began to rise. The coastline is rugged with steep cliffs, especially on the eastern side. Landing is possible at only two locations in sheltered areas on the western side of the Island.

Montague Island is widely regarded as a very special place, given its unique combination of natural and cultural features. It is significant to the Aboriginal community and has a rich European cultural history. The huge granite outcrops, from which the lighthouse is constructed, the crane for ship unloading, the old jetty, the remnant gardens and the stories of success and failure which they tell, wartime submarine activity and post World War 2 defence installations, the graves, colonies of seals and birdlife, the Island topography and isolation are all considered to generate a requirement for special management techniques. There are also suspected maritime archaeological sites nearby and the quarry for the lighthouse material is still apparent.

The boat shed located at the top a the ramp is a single roomed structure clad in weatherboard with corrugated iron gabled roof. Double hung doors lead to the ramp and there is a small opening in the back wall. A cement mounting block remains as evidence of the former winch and cable that was used to haul vessels up the ramp.

In a small bay in the south west of the Island are the remains of the old jetty and slipway, though all of the timberwork has gone. The only vessel landing area is in Jetty Bay on the western side of the Island. It consists of a concrete platform with heavy timber frame and rubber buffers. The jetty is accessed via a rock and concrete ramp that leads down from the boatedge immediately to the south. Adjacent to the Jetty platform is a tubular steel, hydraulic crane.

To the south of the complex are the graves of keeper Charles Townsend and John and

THE ISLAND

The Narooma district is well served by a number of National Parks and Reserves. Inland and parallel to the coastline are the Deua and Waddilliga National Parks. Both areas feature camping, walking, caving and picnicking facilities. The Deua and Shoalhaven Rivers within these areas are popular for swimming, paddling and canoeing. The Waddilliga NP to the south offers a mountaneous wilderness which cradles one of NSW’s largest undisturbed river catchments.

Closer to and on the coast are the Illawong Nature Reserve and Broulee Island Nature Reserve, located north of Moruya, Eurobodalla National Park, north east of Bodalla, the Wallaga Lake National Park, Biamanga National Park and Mimosa Rocks National Park south of Narooma to name a few of the areas that give the coast its name.

The marine environment around Montague Island is particularly rich because of the close proximity of the continental shelf and the warm Eastern Australian Current. Montague Island is one of the most important seabird nesting areas in NSW and contains the only remaining important Australian fur seal haul-out site along the NSW coast and their northern most colony in eastern Australia.

The adjacent mainland essentially supports forestry, dairying and tourism. The Narooma coast, including the waters around the Island is important for commercial and recreational fishing, boating and diving. There is an old pilot station on the Narooma headland which is currently used by the Volunteer Coastal Patrol. It was the main link with the Island.
Isabella Burgess who were the children of headkeeper Mr Burgess, all of which are dated from the late 19th century. The graves were treated with an inappropriate protective coating some time ago and have deteriorated more quickly than expected. The carved messages have been reproduced on an adjacent interpretive marker. The legal policy is to let the gravestones deteriorate naturally.

Other elements include the Navy hut ruin, site of the chicken sheds to the north of the complex, also the tractor shed often referred to as the stables, rubbish tips and associated features and the quarry.

Montague Island is gazetted as a Nature Reserve under the NPWS Act, in recognition of its nature conservation values as an important bird sanctuary. It supports an important penguin breeding colony, a fur seal colony and is one of the more important seabird breeding sites. Management as a Nature Reserve generates certain priorities related to the conservation of natural heritage rather than cultural heritage values. Although the Aboriginal and cultural values are of integral importance they are not currently recognised in the gazettel. Montague actually has a modified natural landscape, with areas of food production, access, old defence sites and jetty areas.

There is currently no native vegetation above one metre high. Early photographs show that shrubs and trees existing prior to and during early European occupation. The thirty seven native species that do grow on the Island, reflect its previous connection with the mainland. Exotic and grass species introduced to the Island by the lightkeepers remain. A mixture of grass species, which are now dominant, were originally introduced in 1916 in an effort to create lawns for the lighthouse. There are still rabbits on the Island and weed control is an issue.

The Island has recently been opened to limited eco tourism tours after a careful and detailed planning process was carried out and scientific monitoring programmes put in place in collaboration with staff from Charles Sturt University. The process aiming to an ecologically sustainable visitor use and planning framework.

There are a number of radio aerials installed on the Island, an important element given the poor reception that is generally experienced along the NSW south coast.

There are a number of walking tracks and trails including the jetty track, the graves track, old wharf track and the old garden track.

The garden site is located north east of Jetty Bay and features fenced enclosure, shed frames and garden plot mounds. The date of construction is unknown however it is clearly evident in 1937 photographs. In 1990 a well was located and it is assumed associated with the garden and is continually fed by an underground spring. The gardens however are overgrown with kikuyu grass.

The penguin viewing area is a small roped off area adjacent to the boathed at the top end of the jetty ramp. It comprises seating that allows a view of the penguins landing on the rock shelf to the south west of the jetty.

A wooden staircase located on the eastern side of the island was constructed by one of the former lightkeepers to facilitate fishing. The stairs are in poor condition. A helipad is located on the eastern side of the Island and is for emergency use, only, as the effect of helicopter noise on the birdlife has not been ascertained.
ABORIGINAL RESOURCES

Two camp sites/middens have been recorded on the Island (2-7-0096 and 2-7-0150) and local information suggests that there may be other areas including a quarry and ceremonial ground which have not been recorded. Pleistocene sites would relate to the a period when the Island was an inland peak about 6 kilometres from the then coastline.

At least two archaeological surveys have been conducted and some artefact scatters located.

THE LIGHTHOUSE PRECINCT

Montague Island Lighthouse tower is an operating navigational aid. New solar panels are set at ground level around the base of the granite rock on which the lighthouse tower is located.

The lighthouse complex contains the lighthouse tower, residences, brick and weatherboard store buildings and communications mast. Sections of the original flagstaff remain standing.

The landscape is characterised by the interaction of the large rounded boulders and both exotic and natural grasses. The grassed areas were maintained in the vicinity of the cottages and there are several small trees within the courtyards. The courtyard walls provide a strong sense of enclosure.

The precinct is located in the mid section of the southern, larger section of the Island. The quarry site from which the stone for the tower was extracted (as was the foundation stone for the Sydney GPO) is also located in the precinct to the immediate north east of the buildings.

The precinct occupies a high point on the Island and the lighthouse is visually prominent rising from a large granite boulder on the eastern side of the precinct.
2.3
The Constructed Image

The Lighthouse complex consists of:

- The Lighthouse Tower
- Head keeper's cottage
- Two Assistant Keepers' cottages
- and a number of associated store and functional buildings, elements and features.

THE LIGHTHOUSE TOWER

The lighthouse is an operational AMSA navigational aid. It is a refined aesthetic structure and has a natural affinity with the landscape partly due to its construction of granite quarried on the Island. The tower sits on a large granite boulder and features 12 metres of dressed granite blocks tapering to the gallery and lantern enclosure.

A flight of granite steps leads to the base of the tower. The tower is entered from a door on the north west side being the most sheltered from stormy weather. Internally the tower is divided into three storeys by cast iron floors connected by a spiral iron staircase which continues and provides access to the lantern. The gallery features wide angled decorative balustrading around its perimeter.

The light is a First Order dioptronic fixed and flashing light which was originally powered by oil. It was converted to electric in 1950 and finally fully automated in 1986 using solar power. The solar panels are mounted on the granite boulder to the north of the lighthouse. At this time the lens was replaced and the original relocated to the museum in Narooma.

HEAD KEEPER'S COTTAGE

The head keeper's cottage located south east of the lighthouse consists of two sections. The T shaped main building comprises of eight rooms connected by T shaped hall spaces. It is surrounded by verandah spaces. A small infill section on the western verandah connects to the L shaped service wing of the building containing kitchen and laundry areas.

The main building and service wing enclose a courtyard area which features the underground water tank and cement flagged finish.

The building is cement rendered both internally and externally and features timber floors connected by an unusual slip jointing technique. The roof consists of corrugated asbestos sheeting fixed to baltic pine lining. This replaced earlier tiles fixed in 1902 which replaced the original corrugated iron roof cladding. These changes altered the roof line. Part of the original roof line is visible above the kitchen. The cottage is largely intact, internally and externally.

Fireplaces occur in the main rooms and feature cast iron fixtures painted black and fitted with grates. Internally cedar trims and detailing feature and built in cedar cupboards are located either side of the fireplace in some of the rooms. New kitchens and bathroom fittings were installed in the cottage as part of the late 1990s conservation works.

The radio room is an important component, as Montague provided the communications link for several other Lighthouses.

ASSISTANT KEEPER'S COTTAGES

The Assistant Keepers' cottages are symmetrical about a central party wall. Each residence is essentially L shaped and consists of four rooms with central corridor wall. Also surrounded by verandah each duplex features detached service wing.

The verandahs which continue around the perimeter of the main section of the building feature the characteristic corner windbreaks. It is not clear when sections of the verandahs were enclosed, however the infill of the verandahs on the western side of the buildings had occurred by 1932. The internal linings were then replaced with compressed asbestos and masonite sheeting during the 1960s.

The main building and detached wing partly enclose a courtyard which features underground watertanks and cement flagged ground finish.

The semi detached residences are also cement rendered both externally and internally. Each of the main rooms feature cast iron fireplaces, most with the side built in storage units. Internal finishes include timber floors, cedar trims and details.

One of the Assistant's quarters has been restored as a house museum, reflecting its 1881 format. This building is now open for inspection by tours.
Conservation works undertaken by NPWS to return it to the 1881 format included the removal of the bathroom enclosure from the rear verandah and the reconstruction of the verandah posts and window joinery. Internal works have included reconstruction of some internal doors and chimney recess cupboards, repainting to the original colour schemes, floor polishing, reconstruction in timber of the old stone fire mantles and refitting of the rear kitchen.

A small outhouse at the rear of the cottage is presently partly used as an interpretive display and retail outlet. The kitchen in the adjacent room is used to serve light refreshments. There are plans to improve the interpretation of the storeroom and reduce the retail area to a glass fronted cabinet.

The second Assistant Keeper's cottage is reserved for on-site research staff. This is not a continuous usage but provides an important resource for the long term research efforts being undertaken. The research work is extremely important and being carried out by some prestigious research organisations. The internal fabric in this building remains more closely related to the state of the complex when taken over by NPWS, since little by way of conservation works has been done in this component. Its condition is reasonable.

**OTHER STRUCTURES & FEATURES**

There are a number of small structures and buildings located at the base of the granite boulder which supports the Lighthouse tower. These generally fulfil their original support and storage functions in relation to the overall complex and infrastructure.

A rendered brick structure (formerly the oilstore now the generator room) and a weatherboard store stand adjacent to the base of the tower and feature hipped roofs clad in painted red corrugated steel.

The original flagstaff is now the radio aerial.
2.4
Significance

Montague Island is an outstanding and relatively intact example of a late Victorian Lighthouse. It is unusual in NSW for its siting on an offshore island and enjoys an unspoilt and spectacular setting. Montague Island is part of a cohesive group of late 19th and early 20th century lighthouses in NSW, each of which demonstrates the incremental changes in the design and construction of the various complexes.

It is an important and representative example of the so called “coastal highway lighthouses” that were erected along the NSW coastline between 1862 and 1903.

HISTORIC SIGNIFICANCE

Montague Island is of exceptional significance for both its Aboriginal and European connections and associations. It is significant through its association with the National Trust of Australia (NSW) as an early example of community action to establish a protected wildlife sanctuary.

The light emitted from the Tower is an important part of the NSW network and the so-called “coastal highway lights” but also offered protection to the intrastate traffic to Narooma, Tathra and Eden. It is one of only two major lighthouses in NSW located on offshore Islands and is significant as a site of a navigational beacon that has been in continuous operation since 1881.

AESTHETIC SIGNIFICANCE

Montague is a fine and intact example of a lighthouse constructed in NSW during the late 19th century and part of the most productive phase of lighthouse construction during the 1880s. The lighthouse tower is a good example of the lighthouse design work of James Barneet. It is similar to the towers at Macquarie, South Solitary, Point Perpendicular and Norah Head, the last two being designed by Barnet’s successor but influenced by his work.

The Montague Lighthouse, constructed of granite quarried on the island, with its tapering walls and outward curving upper platform, curved balustrade is a wall proportioned structure displaying very fine elements of design and craftsmanship. The tower provides a strong visual contrast to the rounded granite slabs and treeless topography of the Island.

The white painted buildings with their collection of chimneys, pitched roofs, verandahs and enclosed courtyards clustered on the highest point of the Island present a visual unity and harmony in form, style and materials. The residences are a strong reminder of the era of staffed lighthouses on the coast of Australia.

The cottages illustrate the relatively minor extent of evolutionary change that has taken place with the majority of lighthouse buildings throughout their operational life. In particular the altered roof lines, with the previously separate verandah roofs now incorporated under the one massing, illustrate the responses to the harsh weather conditions and desire to simplify the roof detailing.

SOCIAL SIGNIFICANCE

The Island has been associated with and has strong social significance to a number of groups including local Aboriginal and early European settlers, who travelled to the Island in search of food, to more recent groups such as the National Trust and research groups.

The Island was occupied by the Light House Keepers and their families for over 100 years and has special meaning to the groups particularly emphasised by the presence of graves.

The radio room at Montague is of particular significance as this Lighthouse was one of the few that provided a centralised communication base for the lighthouses along the entire NSW coast. The radio was also enabled the children at Montague to communicate with the School of the Air based at Broken Hill.

SCIENTIFIC SIGNIFICANCE

The Island is one of the most significant seabird breeding area in NSW and contains the only important seal haul-out site in the state.

Many of the intact alterations to the buildings and site are a reflection of technological improvements and reflect changes in the system as well as changed in living standards.
The numerous archaeological sites on the Island are significant and relate to Aboriginal, European and even natural elements.

The Radio facility is unusual and important within the Lighthouse network.

SIGNIFICANCE TO ABORIGINAL PEOPLE

The significance of this site for the local Aboriginal community is the entire island on which the lighthouse sits and their long standing economic and ceremonial association with the area.

ELEMENTS OF PRIMARY AND CONTRIBUTORY SIGNIFICANCE

Grading the comparative significance of various elements or characteristics of an historic place or building is a useful management approach to support future programmes of detailed fabric or artefact conservation.

The majority of the conservation management plans prepared for AMSA included a graded table of significance for the various components of the lighthouse complexes, including landscape and archaeological features and of individual buildings.

The subsequent allocation of graded levels of significance in some of the CMPs is considered by this consultant to be overly complex and not beneficial in terms of providing a clear background to the conservation and management of building fabric or other elements.

The conclusions reached by the consultant team preparing this overall Conservation Management Plan have taken a different emphasis.

The characteristic considered to be the most important in relation to the NPWS Lighthouses is the manner in which they have evolved progressively while retaining their essential integrity and significant features. Accordingly a three tier significance rating has been adopted.

- Characteristics of Primary Significance
- Characteristics of Contributory Significance
- Characteristics of Little or No Significance.

Primary Significance:

All those elements and features that relate to the initial construction and operation of the particular Lighthouse and its supporting buildings and infrastructure. It includes the pre-existing topographical and landscape characteristics, initial cultural landscape features and sites of Aboriginal cultural significance.

Contributory Significance:

All those elements which relate to the subsequent use and development of the place as an operational Lighthouse, right down to the period when they were transferred to NPWS or other relevant agencies such as Australian Property Group (South Solitary Island) or the Cape Byron Headland Trust. It includes subsequent natural and cultural landscape features and post contact period sites and places of Aboriginal cultural significance.

Elements Of Little Or No Significance:

Generally only those items which relate to the subsequent re-use and development of the place after it was transferred to NPWS.
3.0 Constraints & Opportunities

This section confirms the listing status by various heritage agencies for the Montague Island Lighthouse and summarises the views of relevant community members or representatives.

Refer to the main Plan for guidance with regard to the appropriate responsibilities and actions to be taken in relation to these listings and viewpoints.

3.1 Heritage Recognition & Listing Status

NATIONAL AGENCIES

The Montague Island Lighthouse Group has been listed on the Register of the National Estate, administered by the Australian Heritage Commission.

AMSA retains operational use of the tower and the small weather office, under the terms of the Heads of Agreement.

STATE AGENCIES

The primary conservation and management framework for the Lighthouse is the NSW National Parks and Wildlife Act. The site of the Lighthouse complex is not currently gazetted within the Montague Island nature Reserve, but should be added to it. The Island is managed under the Montague Island Nature Reserve Plan of Management, February 1996. This will need to be amended in accordance with the recommendations of this Plan.

Montague Island Lighthouse is contained within the NPWS s170 Heritage and Conservation Register, under the NSW Heritage Act and Heritage Amendment Bill 1998.

Montague Island Lighthouse has been promoted by NPWS for listing in the State Heritage Register.

Montague Island Lighthouse Group is not recognised in Eurobodalla Shire Council’s Heritage Inventory or LEP.

Eurobodalla Shire Council and the Surf Life Saving Association require occasional access to the Island to maintain their radio installations.

NATIONAL TRUST OF AUSTRALIA (NSW)

The Island has been a wildlife sanctuary under the control of the National Trust since 1953.

The Lighthouse and buildings were classified by the National Trust in 1977 and the landscape was formally classified in 1979.

ABORIGINAL COMMUNITY

There are primarily two Aboriginal communities currently associated with the Island. The two groups, the Walbunja and Djiringanj, both claim Native title to the whole of the Island.

The Aboriginal community see the lighthouse complex as offering potential for future site preservation, commercial (retail sales) and interpretive facilities and reuse of a building for temporary accommodation of Aboriginal visitors.

Most recently local groups have used the island for “men’s business”, ceremonial and cultural purposes. Juvenile offenders have been taken there and told of “the law”.

NPWS consultation with the Aboriginal community is presently informal and this relationship is appreciated by the Aboriginal community. However, they would like to see the model of the Biamanga Steering Committee used for more direct involvement in planning and management of the Island but with the addition of a Memorandum of Understanding. Major issues concern access and continuation of the traditional uses of the Island, protection of sites and continuity of hunting and fishing rights.

The Aboriginal community have expressed a desire for joint management of Montague Island Nature Reserve concerning land management, site protection, fishing rights, cultural tourism and community access. They also seek more Aboriginal training particularly
as tour guides, and NPWS Aboriginal appointments of local people, local Aboriginal employment and would like to see the management style to remain informal but the management structure to be reviewed and based on a MOU or similar consultative framework. An Advisory Committee with a minimum of three representatives from the Wogonga (Narooma) LALC and each of the Native Title Groups is seen as an appropriate representation.

The Aboriginal community use of and visitation of the Island is related to community educational and ceremonial projects. There is currently no Aboriginal and local tourism and no input to the guided tours or educational walks presently conducted on the Island. Future interest in these types of guided tours, including bush tucker and history tours is expected.

LOCAL COMMUNITY

Guided tours are currently being undertaken by NPWS partly due to the response from community demands to provide access to the Island.

Community expectations have been recognised by NPWS as a powerful force and believes that effort must be directed towards fostering support and cooperation from the community.

NPWS receives positive local media coverage and the local community is interested and generally supportive of management directions.

The community generally would like to see permanent staff continue to be stationed on the Island, public access maintained through tours, particularly guided tours and competent management of the natural and cultural elements of the Island.

The community is also likely to voice concern if the tourism causes any unacceptable level of impact on the Island Reserve.

TOURISM OPERATORS

There are no really well established eco tourism operations in the area.
On Montague guided tours are regularly run by local operators, under licence from NPWS. Two boats are based at Narooma. Adults are charged $40.00 for the tour, with NPWS receiving about $12.00 from that amount as a licence fee.

The Service has assisted promotion of the Island and the tours but there has not been a concerted effort in marketing and advertising either by NPWS or the Licensed operators.

The Regional Economic Impact Analysis concluded that Montague Island Nature Reserve does make a contribution to the economic activity in the region in which it is located. Expenditure by NPWS on operating and managing the Island and expenditure in the local Narooma economy by visitors make a positive direct and indirect contribution to the regional business turnover, value added activities and local incomes and employment.

3.2 Conserving the Cultural Resources

THE CONDITION OF BUILDINGS & STRUCTURES

The buildings and elements are currently in good condition after a general maintenance and catch-up conservation programme to the buildings. The exteriors have been painted in recent years and the rainwater disposal systems are in good order. There is some evidence of rising damp and some of the electrical and plumbing infrastructure was found by NPWS to be in an untradesmanlike condition due to a long period of maintenance by lighthouse staff.

The interiors of the central Assistant Keeper’s cottage has been restored to its 1881 configuration. Works have included treatment of rising damp, replacement of lost mortar in walls, treatment of dry rot, polished finish to floorboards, joinery repairs and reconstruction of one built-in cupboard in the fire breast recess, upgraded wiring and plumbing alterations, plastering repairs and the general maintenance of the building fabric. There had also been some settlement cracking.

The internal doorway between the two cottages, that was a typical early 20th century feature introduced to achieve a mix of accommodation has been blocked and the door joinery transferred back to its original location, providing access to one of the bedrooms from the corridor. A paint scheme replicating the original, based on paint scrapes, has been introduced into this section.
CULTURAL & NATURAL LANDSCAPES

Montague Island and the adjacent coastal zones feature considerable natural and cultural aspects.

The coastal zone consists of a number of National Parks and Reserve areas in addition to other natural landscapes including a number of beaches and headlands with considerable rock formations and rock pool aquariaums. The marine environment around Montague Island is particularly rich seascape because of the close proximity of the continental shelf and the warm Eastern Australian Current.

Montague Island has a unique combination of natural and cultural features. It is significant to the Aboriginal community and has a rich European cultural history. However the cultural values, although well managed are not recognised in its current gazetted as a Nature Reserve.

Montague Island is a of importance as a bird sanctuary and as an important penguin breeding colony, a fur seal colony and is one of the more important seabird breeding sites.

However Montague is regarded as having a modified landscape. The cultural sites, including the Lighthouse complex and associated wharf and store structures, gardens and remnant navy huts remain as evidence of the cultural landscape which has modified the existing natural one.

ABORIGINAL CULTURAL RESOURCES

Two middens sites appear on the NPWS Register for the Island, however it has been suggested that more sites are located on the Island. Potential sites being additional middens, camp sites, possible quarry and ceremonial areas. At least two surveys have been conducted, however more comprehensive research is required.

Potential interpretive and research themes being pre-historical occupation, land and sea use, mythological story, possible contact sites, mutton bird collection and seasonal camps.

Current interpretation of the Island includes minimal mention of the Aboriginal history and significance, tending to concentrate on the Lighthouse.

HISTORICAL ARCHAEOLOGICAL RESOURCES

The Lighthouse Precinct and the Island in general has the potential to yield information related to the pre-Lighthouse, initial construction and subsequent use and development of the Island through the surviving archaeological material. Aspects such as the various fishing and scientific expeditions and World War 2 activities on the Island. There are also suspected maritime archaeological sites nearby and the quarry for the lighthouse tower is still apparent.

The whole island should be regarded as an area of high archaeological sensitivity.

NAVIGATIONAL AIDS

The Lighthouse still functions as a navigational aid. The Lighthouse itself and the solar panels remain the responsibility of AMSA under the Heads of Agreement.

3.3 Other Management Issues

PRECINCT & SITE MANAGEMENT

Montague was taken over in 1986 and occupied by the Service in 1989. It is currently managed under a Plan Of Management.

Access by boat from Narooma is governed by the sea conditions at the Narooma Bar and limit access to the Island to about two days in every three. NSW Waterways will not licence any boats to cross the Bar if the seas have a greater than two metre swell and the wind speed exceeds 20 knots. The loss of two people from a small recreational craft, who were drowned trying to cross the Bar in worse conditions on 7 June 1998, reinforces this safety limitation. Similar restrictions apply to Bermagui.

There is an old pilot station on the headland at Narooma, which is currently used by the Volunteer Coastal Patrol. It used to be the main visual and functional link with the Island.

Montague Island is gazetted as a Nature Reserve under the NPWS Act. This is in recognition of its importance as a bird
sanctuary, with shearwaters, penguins and seals.

Gazetted as a Nature Reserve poses limitations on allowable uses for the Lighthouse complex of buildings. Portions of the Island could be gazetted as an Historic Site in recognition of the layered cultural values. Considerable care will be required in the definition of the areas that may be so gazetted, given the scatter of food production areas, defence sites, loading jetties, access tracks and graveyards across the main part of the island.

Under the Nature Reserve gazetted, normal 4WD movement is not allowable and walking tracks will only be formed for educational purposes. There is considerable need to research the likely impacts on the bird life in more detail, especially the impact of the close proximity of the visitor with the penguins.

There are still rabbits on the Island and weed control is an issue. The impact of a weed control programme on the penguin colonies has yet to be assessed fully.

The water storage capacity of the Island is about 50,000 litres, in a combination of original and new storage tanks. Even with this capacity and controlled visitation, in the latest drought the island was down to about 4 weeks supply.

Septic tank services are monitored to check their capacity against the established carrying capacity. Clearly there is more use now than when the island was staffed by three families. The tank water is specially filtered and treated with UV light to overcome the problems of run off from asbestos roofing.

The lighthouse is powered by solar panels, mounted on the granite boulder to the north of the lighthouse. The choice of location was restricted by distance and required orientation. While they are in the visual curtilage of the lighthouse tower, they are an interpretative device.

There is a 20 KVA generator, which is expensive to operate, especially if a long stay visitor wants to have power at all times. Replacement costs, on an annual basis are also expensive.

There are a number of radio aerials installed on the Island, an important role given the poor reception that generally is experienced along the NSW south coast. Access for maintenance by the relevant parties is an issue.

BUILDING CONSERVATION & RE-USE ISSUES

The last re-roofing exercise (1950s), when the asbestos roof was installed, saw the overall roof profile simplified, with the main roofing taken directly out over the verandahs. It is not known whether the old verandah roof framing was left under the new profile. There a budget allowance of $250,000 within the next ten years to replace the roofing. The original roofing had been heavy duty corrugated iron and the second unglazed terra cotta tiles.

There has been a Risk Assessment Report and BCA analysis on the tower completed for AMSA. NPWS will take a less interventionist compliance strategy than the BCA report suggested, given the need to protect the important conservation values and historic fabric.

The main cottage is currently used by caretaker families, who are Service personnel and who spend no more than 12 months on the Island. The option of using one of the smaller cottages has been rejected as they are not big enough for a family to live in. The caretaker looks after the place and performs general duties, including assisting the tour Ranger guide in serving in the retail outlet.

The middle Assistant Keepers Cottage was identified in the 1993 NPWS Conservation Plan as suitable for a museum, reflecting its 1881 format. A lot of work has been done in recent years in returning the interiors of this building to an 1881 format, even though the outside remains at a later period. The National Trust is currently preparing a Museum Plan for these spaces and the purchasing phase should commence shortly. If the Museum Plan is implemented, a clear interpretative strategy will be necessary to clarify that is only the interiors that have been reconstructed and used in the 1881 imagery.

At present the small store building at the rear of the cottage is used as an interpretative display and retail outlet. The adjacent kitchen is used to serve light refreshments. There are plans to improve the interpretation of the storeroom and reduce the retail area to a glass fronted cupboard. This may have a negative effect on sales.
The second Assistant Keepers cottage is currently reserved for on-site research staff. This is an occasional use, depending on research projects but provides an important resource for the long term research efforts being undertaken. The research work is extremely important and undertaken by some prestigious research organisations.

Other buildings are used for their original infrastructure support functions. Sections of the original flagstaff remain standing.

The two graves were treated with an inappropriate protective coating some time ago and have deteriorated more quickly than expected. The carved messages have been reproduced on an adjacent interpretative marker. Given the importance of the gravestones to the history of the island, it is essential that they remain in-situ and be allowed to weather.

Given the national significance of the Lighthouse complex, its location within a nature Reserve, the evolutionary experience that has actually produced relatively few external changes, the unreliability of regular access for visitors, and the building conservation actions already taken by NPWS in recent years, it is clear that conservation by adaption is the most appropriate conservation action.

In this context however, Montague Island is not the place to adopt the preferred model that is recommended within this Plan for the majority of the mainland NPWS Lighthouses, where the Assistant Keeper’s Cottages are to be adapted for short term holiday accommodation. The nature of access over the Narooma Bar, which can only be guaranteed on an average of two days in three, and the restriction on helicopters, means that holiday accommodation is not likely to prove a viable option.

Adaption should therefore concentrate on providing accommodation for site management, long stay research staff accommodation, interpretation and cultural tourism activities.

The 1993 Conservation Plan decision to create a museum based on the 1881 building format, within one of the Assistant Keepers’ Cottages is reasonable within the context of an interpretation and cultural tourism programme for the island. As noted above, the 1881 format should be confined to the interior of the subject cottage.

The Head Keeper’s Cottage should be used for a combination of site management, interpretation and additional visitor facilities which could possibly replace those currently established in the outbuilding behind the Assistant’s cottage. The extent to which the Head Keeper’s cottage is re-used for these purposes will depend on the need to continue using the building for on-site Ranger accommodation. In any event, parts of the building such as the radio room are important components of the cultural story and should be made available for interpretation.

**TOURISM MANAGEMENT ISSUES**

Peak season for tourism is between December and Easter. September to November for whale watching is popular, as the whales head south. They are generally too far out to sea on the northern journey. The Island features on a promotional video issued by Eurobodalla Council and is prominently featured in local tourism promotional brochures. However experience shows that local advertising is not effective. It is better to market into the larger cities and towns.

While most of the Victorian generated tourism stays further south, there is the potential for Montague and Green Cape to pick up some of the tourism interest generated by the Victorian lighthouse re-use.

The current tours and merchandise sales are increasingly generating reasonable profits for the District. The merchandising range is quite limited and there is a debate in the District office about whether it is better to focus the retailing on the “captive” Island tour market, or increase sales outlets in Narooma.

The District is establishing a Special Purpose Account for managing the income derived from the Island. It is possible that in about ten years the Island will be self sustaining, once all the major capital works are completed.

There is a predetermined carrying capacity established for the Island. This is based on a combination of the size of boats that can tie up at the Island wharf, the facilities on the island, capacity of the existing toilet systems to cope and the impact on walking trails. The established carrying capacity is 90 people within any 24 hour period.
The carrying capacity equates to about 30,000 per annum. Current visitor numbers are about 4,500 per annum, determined largely by the weather and seasonal tourism patterns. With tourism in the region growing by about 1.6% pa, it is unlikely that Montague will reach it maximum carrying capacity for a long time.

The District has detailed Island visitation records for the last few years. These figures also indicate that there is considerable for growth that would encourage the mounting of a promotions campaign.

There are two basic tour options, a 3 hour day time tour and a 4 hour evening tour to watch the penguins come ashore at sunset. All tours are accompanied by a NPWS Ranger as guide. The District runs special training sessions for the guides and has handbooks for their use. They are accredited with Eco Tours of Australia.

Both tours do a walking tour of the island and are served a light refreshment. There is a small retail outlet in the old store at the rear of the middle quarters. There are two banks of seats on the hillside above the jetty, where visitors can watch the penguins come ashore.

The walking track up from the jetty to the lighthouse is quite steep and rest stops have been established, even though this can impact negatively on a tight tour programme. There are a number of stainless steel interpretative signs at various points along the track up to the lighthouse.

Gazettel of the Island as a Nature Reserve places limitations on the uses that can reasonably be accommodated. The recommended gazettel of portions as an Historic Place will enable a wider range of conservation and use options to be adopted.

The main practical limitation to overnight stays on the Island is the unreliability of the weather. It may well be that people can get onto the Island on the appointed day, but there is a good chance that they will be unable to leave on the next.

Other than in the context of existing leasehold agreements, regular public helicopter access is not permissible due to the potential impact on the bird colonies. It has been ruled out by an RFA. Unfortunately the very time that regular access might be required, in summer, is the peak breeding season.

The problems of the sea conditions could be overcome by larger seacat style vessels, but the market place will not support the capital investment.

The Service is beginning to attract coach parties for the day tours, on the basis that if the weather is not good they can be taken on a river cruise.

Bookings are currently taken at the NPWS Narooma office as well as by the information centre and the cruise operators. The NPWS office also has a small retail outlet. Experience has shown that the older visitor appreciates the cultural and historical aspects, the younger visitor the trip, the natural aspects such as the seals and penguins.

Once the access license agreement is attained with AMSA, NPWS will probably run specially organised lighthouse tower tours, since the time taken to get small parties up the tower would disrupt the existing tour format.

NPWS has commissioned a number professional photographers to photograph the Island and its wildlife. These images are used for postcards and other promotional work.

The Montague Island Business Management Plan listed the following weaknesses of the existing tours to the Island; being difficult access being an off-shore Island, limited number of licensed charter vessel operators that can conduct commercial night operations across the Narooma Bar, sea and wind conditions, jetty landing site on the Island, no disabled facilities available.

Increased opportunities will arise through improved marketing, improved interpretation, improved facilities and increased income from Island Shop.

RECENT ACTIVITIES

Conservation works to the middle cottage to return it to 1881, including removal of the bathroom set on the rear verandah and reconstruction of verandah posts and window joinery.

Internal works to the cottage have included reconstruction of some internal doors and chimney recess cupboards, repainting to original colour schemes, floor polishing, reconstruction in timber of the old stone fire mantles, refitting of the rear kitchen.
Services of Peter Freeman, Conservation Architect, have been utilised for the conservation works to the Assistant Keeper’s Cottage. Local tradesmen have been the mainstay of the works.

The National Trust Museum Plan is still in preparation. The lightkeepers were generally working people who took their furniture with them. Only furniture for the visiting Inspector was provided.

CURRENT & MID TERM PROPOSALS

Purchasing for the Museum.

Finalisation of the tower access licence with AMSA.

More research into archival material.

Dealing with the rising damp, probably by opening underfloor vents in the three skin thick rendered brick walls.
4.0 Primary Conservation Policies for the Montague Island Lighthouse

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part D of the Conservation Management and Cultural Tourism Plan, the following primary policies establish the essential conservation framework for the Montague Island Lighthouse.

- The Montague Island Lighthouse shall be retained and managed by NPWS as a key contributing component of the overall NPWS Lighthouse Collection.

- The Conservation Policies and Implementation Guidelines contained in the overall Conservation Management and Cultural Tourism Plan shall be applied, as appropriate, to the Montague Island Lighthouse.

- NPWS shall re-gazette the Lighthouse precinct and associated cultural landscape areas of the Island as an Historic Place, in recognition of its complex cultural and natural significance.

- NPWS shall conserve and manage the lighthouse complex as a collection of fine historic buildings and supporting site features that clearly express its original functional role and which has gradually evolved since initial construction in response to progressively developed coastal navigation technology and organisational practices. Recognition and respect for the evolving development of the complex from 1881 until the mid 1980s shall form a key basis for conservation and management of the buildings, technology, artefacts, archaeological sites and infrastructure. Refer to Section 17.1 of the main CM&COTP for the Conservation Principles related to fabric, features and associated artefacts of differing significance.

- Conservation of the Montague Island Lighthouse shall protect, respect and where appropriate enhance the identified and closely interrelated characteristics of cultural and natural significance of the place, in its own right and as a component of a larger state, national and international network of late 19th and early 20th century lighthouses.

- All essential and outstanding catch-up repair and conservation works to the buildings and site elements shall be undertaken within a period of one year.

- The buildings and site elements shall be conserved by the implementation and long term continuation of a rigorous, cyclical and appropriate maintenance regime, starting immediately. This regime shall seek to maintain the buildings and site elements in a character and condition that equates to the time when the complex was an operating lighthouse facility, with a full time staff.

- NPWS shall conserve and manage the immediate site and associated cultural landscape as a modified natural landscape with important cultural landscape characteristics that clearly illustrate the development and occupation of the precinct as an operational lighthouse complex, from 1881 until the mid 1980s. There shall also be recognition of the other layers of cultural history on the headland, including the defence activities.

- NPWS shall conserve and manage the wider Montague Island as a natural landscape with important wildlife breeding features

- NPWS shall conserve and manage the wider Montague Island as a natural landscape that illustrate the features of significance to Aboriginal people.

- NPWS shall conserve and manage the Aboriginal heritage characteristics of the Island in consultation with the relevant representatives of the local Aboriginal communities.

- NPWS shall conserve and manage the complex and its setting in a manner which communicates and interprets the multi-layered nature of its cultural and natural significance to the general public.

- NPWS shall facilitate the on-going operation of the lighthouse tower by AMSA as an operational navigation aid,
within the framework of the Heads of Agreement between AMRSA and the State of NSW.

- NPWS shall conserve and manage the complex by means of adapting the interiors of the former cottages and support buildings to new uses which are identified in the site specific Interpretation, Nature Reserve research and Tourism Plans and which are compatible with their evolved architectural and spatial characteristics and cultural significance.

- As appropriate in terms of maintaining appropriate levels of on-site security, NPWS shall utilise the Head Keeper's Cottage for a combination of site administration, interpretation, retail, food services and visitor facilities.

- The interiors of the southern Assistant Keepers' Cottage shall continue to be developed as an interpretative space, focusing on the nature of the building as originally used in 1881.

- The northern Assistant Keeper's cottage shall continue to be used as periodic medium length stay accommodation for research groups, until such time as it is no longer required for such purposes.

- Should this cottage no longer be required for research staff, its future use should be re-examined in the light of a revised site specific interpretation plan.

- There shall be no new permanent buildings erected within the immediate Lighthouse precinct, or elsewhere in the land gazetted as an Historic Site. Whilst permitted under the current lease, the design and positioning of any future navigational equipment or energy source infrastructure shall be carefully considered to avoid or minimise any adverse impact on the heritage or visual characteristics of the overall lighthouse precinct.

- NPWS shall limit the number of visitors that are permitted on the Island at any one time or over a yearly cycle to the number identified in site specific tourism plans.

- NPWS shall conserve and manage the Montague Island Lighthouse in full recognition of the heritage and environmental management provisions of the relevant aims, objectives, standards and procedures of the Australian Heritage Commission, NSW Heritage Council, NSW EP&A Act, Regional and Local Environmental Plans, the National Trust of Australia (NSW), NPWS and good conservation practice as promoted by Australia ICOMOS.
5.0
Site Specific Conservation Policy Implementation

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part E of the Conservation Management and Cultural Tourism Plan, the following guidelines establish the essential implementation framework for the Montague Island Lighthouse.

The Conservation Policy Implementation recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

These site specific recommendations are framed in the same categories as the Conservation Policies and Implementation Guidelines of the main Plan, for ease of cross reference.

5.1
Reference to Main CM&CT Plan

SHORT TERM

- Refer to the Conservation Policy and Implementation Sections of the main NPWS Lighthouses Conservation Management and Cultural Tourism Plan. All of the following policies and implementation recommendations should be read in association with the larger policy framework.

- Participate in the Service wide review and assessment of the CM&CTP.

MEDIUM TERM

- Give special regard to the NPWS management recommendations and other general policies contained in the CM&CTP. In this regard, ensure that close liaison is maintained with all relevant stakeholders, particularly those concerned with heritage management and tourism operations.

- Manage the site in accordance with general NPWS management policies and guidelines.

- Review and update the Montague Island Nature Reserve Plan of Management in accordance with the findings and recommendations of the final CM&CTP.

- Facilitate the co-ordination of the Montague Island Lighthouse conservation management and cultural tourism activities with the remainder of the NPWS collective resource. In particular contribute experiences and lessons to the other Lighthouse managers through the Lighthouse Reference Committee.

5.2
Aboriginal Heritage Conservation Policy Implementation

SHORT TERM

- Review the findings of recent Aboriginal site surveys and the previously collected knowledge.

- Review the current consultation processes with representatives of the Aboriginal community.

- Prepare medium term plans for undertaking further site surveys which will enhance the overall understanding of the Aboriginal cultural resources.

MEDIUM

- Undertake additional research and site surveys to expand the knowledge of Aboriginal cultural resources, including in the mainland places that relate to the coastal islands.

- Refine and expand the consultation process, utilising an MOU, or other appropriate consultative mechanism, with the local Aboriginal community, including issues of Aboriginal involvement in planning decisions.

- Maintain active liaison regarding any Native Title issues that may relate to the Island and the Lighthouse precinct.
LONG TERM

- Continue active consultation with the Aboriginal community to expand the understanding of their cultural heritage and involvement with the management and cultural tourism programmes at the Lighthouse and the Island generally.

- Periodically review the ecological and landscape management plans and upgrade as necessary.

5.4 Built Environment Conservation Policy Implementation

SHORT TERM

- Complete any outstanding components of the catch up repair programme.

- Complete the interior conservation works to the Assistant Keeper's cottage as part of the 1881 interpretative display.

MEDIUM TERM

- Implement a rigorous building maintenance programme for the various buildings on the precinct.

- Facilitate the on-going maintenance of the Lighthouse Tower by AMSA.

LONG TERM

- Ensure that a rigorous maintenance plan is implemented for all buildings, including any lease arrangements.

- Repair or replace deteriorated elements of building fabric, generally by replacing like with like.

5.5 Historical Archaeology Policy Implementation

SHORT TERM

- Review known information regarding historical archaeological resources.

- Collect copies of relevant historical documentary material that may provide background research in future archaeological assessments.

MEDIUM TERM
• Formulate an archaeological zoning plan for the Island, including the agricultural sites, graveyards, former jetty and the former military facilities.

• Undertake additional archaeological assessments of areas with known potential, particularly if development or infrastructure proposals are under consideration.

LONG TERM

• Ensure that any archaeological management activities are undertaken in accordance with the NSW Heritage Act and Service policies.

5.6 Lighthouse Precinct Conservation Policy Implementation

SHORT TERM

• Continue current programmes of site management.

• Ensure that existing levels of supervision and security are maintained

• Maintain rigorous rubbish management programmes.

MEDIUM TERM

• Continue to maintain Island walking tracks...

• Monitor the number and flow of visitors and their impacts on the sensitive ecological and cultural features of the Island.

• Progressively monitor site safety issues. Upgrade as required, after consideration of likely impact on significant characteristics.

• Review site security and general management activities and consider the potential for maintaining these without the need for an on-site caretaker living in the Head Keeper’s cottage.

• Liaise with AMSA to ensure that the progressive introduction of new navigational technologies into the overall precinct does not negatively impact on the significant characteristics.

LONG TERM

• Reconstruct the flagpole.

• Avoid the construction of any new buildings within the Lighthouse precinct or on the Island generally.

5.7 Building Adaption Policy Implementation

SHORT TERM

• Complete the installation of the 1881 interpretative display and visitor facilities in the Assistant Keeper’s cottage and associated outbuildings.

• Continue the use of the second cottage as accommodation for field researchers.

• Continue the use of the Head Keeper’s cottage as caretaker accommodation, until revised accommodation mix is approved.

MEDIUM TERM

• Adapt the Head Keeper’s cottage to provide the range of interpretive, retail, food services, management support that is emerging as a successful direction for a number of the other NPWS Lighthouses.

• Prepare REFs, submit and gain approval for any new identified direction.

• Complete the upgrading of kitchens and bathrooms of the cottages for visitor facilities.

LONG TERM

• Ensure that any future building adaption programmes respect the architectural nature and spatial arrangements of the particular building.

• Ensure that any future programmes of reuse are undertaken in accordance with the recommendations of the site specific Interpretation Plan.
5.8 Interpretation Planning Implementation

SHORT TERM

- Co-operate in and contribute to the implementation of the NPWS Lighthouses Collective Resource Interpretation Plan.

- Consolidate relevant historical, documentary and other material.

- Identify any likely subjects for oral history capture, from both the Aboriginal community and those who were part of the operational phase.

MEDIUM TERM

- Commission and implement a site specific Interpretation Plan, to be prepared within the framework of the NPWS Lighthouses Collective Resource Interpretation Plan.

- Implement oral history programmes.

- Implement image capture programmes.

- In accordance with the Interpretation Plan, supplement interpretive signage within the precinct.

- Incorporate the on-shore telegraph station site into the interpretation programmes of the Lighthouse.

LONG TERM

- Periodically review and upgrade the site specific Interpretation Plan and interpretive activities.

5.9 Cultural Tourism Policy Implementation

SHORT TERM

- Continue the existing licensing arrangements with local tour operators for packages to the Island.

- Continue to consolidate background information on visitor patterns and tourism opportunities for the Island.

MEDIUM TERM

- Upgrade the site specific tourism plan.

- Continue and regularly upgrade Lighthouse information and familiarisation programmes for the people who staff the Local Tourist Information Office.

- Continue the carefully supervised tours up the Lighthouse tower as circumstances permit.

- Periodically review and amend any operator licences for the organised tours and any recreational activities that may take place on the Island or in its vicinity.

- Facilitate the incorporation of the nearby Museum into Montague Island and Lighthouse cultural tourism programmes.

LONG TERM

- Monitor cultural tourism programmes.
6.0

Bibliography


Australian Heritage Commission, Register of the National Estate Database, Location of Montague Island Lighthouse Group, Narooma NSW, Database No: 000977, File No: 1/08/271/0006.

Constable, Ross, Montague Island Nature Reserve Building Conservation Plan Review, on Issues relating to the existing and potential use of the place, September 1998.


NSW NPWS, Regional Economic Impact Analysis Montague Island Nature Reserve, Summary of Results, 1998.


Author unknown, Montague Island Business Management Plan, date unknown.
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1.0 Introduction

1.1 Relationship to main Conservation Management and Cultural Tourism Plan

This Supplementary Information on the Point Stephens Lighthouse supports the NPWS Lighthouses Conservation Management and Cultural Plan. It provides site specific Building and Site Description Overview, with information and analysis to assist the relevant NPWS managers translate the findings and recommendations of the main Plan into the site specific issues.

This Conservation Management and Cultural Tourism Plan and this Supplementary Information supersede the Point Stephens Conservation Management Plan prepared for AMSA in 1994.

In accordance with the project brief, the information contained in Section 2 of this Supplementary Information has been drawn from the AMSA Conservation Plan but summarised and rearranged for consistency across the whole NPWS Lighthouses resource.

The information on Aboriginal heritage and its significance to Aboriginal people, is based on the research and discussions undertaken by Mary Dallas during the preparation of the main Plan.

The detailed historical background and building analysis contained in the AMSA Conservation Plan has been reproduced and is attached to this supplementary plan as reference material.
2.0 Understanding the Resource

2.1 Historical Background

ABORIGINAL MYTHOLOGY

The Port Stephens area was inhabited by Aborigines of the Worimi tribe. The Worimi tribe was made of the Grewerigal, Gamipingal and Miangal clans who lived on the waterfronts around the Port. Another two clans apparently lived further inland. The Aborigines in this area were noted as being fairer in skin colour and taller and stouter in build than the Port Jackson Aborigines.

The mythological associations of the island are not known however numerous middens and camp sites are located on the Island and adjacent coast. Local information suggests many more sites are located on the Island including a possible Bora Ring of ceremonial area which are not reordered or registered with NPWS.

The Island may have been used as a fish spotting site and place for lobster collection.

EUROPEAN DISCOVERY & EARLY SETTLEMENT

In 1770 Captain James Cook sailed past the Yacaaba and Tomaree headland when he travelled north to chart the NSW coast. Cook noted in his journal that he had seen an inlet on the north side of a rocky point which he named Point Stephens. Cook also noted headlands and bays through the inlet, but did not enter the port he named Point Stephens after Sir Philip Stephens, Secretary to the Admiralty.

It was not until 1791 that the first Europeans on a ship called the SALAMANDER, entered the port seeking shelter from bad weather. In 1795 the HMS PROVIDENCE also sailed into Port Stephens seeking shelter from bad weather. Its Captain, Captain Broughton was surprised to find four white men, escapees and survivors of Parramatta Gaol and the first Europeans to actually live in Port Stephens, living with the Worimi aborigines.

In February 1795, Charles Grimes, Deputy Surveyor of the Colony, was sent to Port Stephens in the FRANCIS to survey the Port and surrounds. Grimes called Point Stephens "Mistaken Island" as mariners mistook the entrance to Fingal Bay for that of Port Stephens. In 1811 Governor Macquarie extensively explored the port. While the port at this time was considered large and safe, the land was thought to be barren and settlement was therefore not recommended. However, like other places on the NSW coast, early commercial activities were stimulated by cedar cutters. From about 1816 onward Port Stephens was a centre of activity, through the activities of the timber getters. By 1823 the industry was well established in the district and vessels were visiting the port to load the cedar for direct shipment to England.

In the 1820s the Australian Agricultural Company was established on the northern side of Port Stephens at Carrington. They had been granted a charter by Parliament to occupy one million acres of pastoral land in NSW in return for a guaranteed investment in the land and employment of convicts. Captain William Cromarty also began to cultivate the land on the southern side in the area known as Soldier's Point and Salamander Bay. By the 1830s sheep farming had also been unsuccessfully attempted.

The fishing industry also began in the early 1800s, brought on by the arrival of groups of Chinese fishermen in Nelson Bay. Six to eight boats worked the local waters using both nets and lines. The fish and lobsters taken were salted or dried. In the 1880s Europeans took up the trade by which time the market was for fresh fish which presented some problems and caused the industry to decline.

As usage of the port increased a succession of surveyors and hydrographers were sent to the place. In 1826 Henry Dangar and John Armstrong for the AA Company, in 1828 William Johns on HMS RAINBOW, in 1845 Phillip Parker King, 1866 Frederick Sidney, the list continues. As the port was mapped and increasingly used it soon became clear that mariners required the services of navigation lights to direct them through the narrow entrance to safety.

Port Stephens has been a major centre for coastal maritime trade since the early decades of the 19th century, although numerous attempts to establish a large urban settlement have failed.
DEVELOPMENT OF THE Lighthouse

Twenty four vessels are known to have been wrecked in the area prior to the opening of the Point Stephens Lighthouse. The most serious of these was the DOVE in 1828 with the loss of seven lives, and the PANDORA in 1836 with the loss of five lives. Other shipwrecks occurring in the time before the construction of the light resulted in the loss of over thirty seven lives.

Point Stephens, a rocky promontory southward of the entrance to Port Stephens was chosen as the site of the light as a number of ships mistook the entrance to Fingal Bay (or False Bay as it was known then) for the main entrance to Port Stephens, at this time a busy timber port. Connected to the mainland by a sand bar, once named “Narrowgut”, the Point Stephens Lighthouse would occupy the eastern rise of 75m high Mt Stephens.

Relatively few lighthouses were constructed in this period. A significant change occurred in 1862 when the Department of Harbours, Lighthouses and Pilots was established with Francis Hixon appointed as Superintendent. It is generally regarded that Hixon provided the impetus for the construction of a number of lights on the NSW coast at this time.

Tenders for the construction of the Point Stephens lighthouse were called in October 1860. The contract for the construction of the Point Stephens Lighthouse was initiated in 1861 and work began. The successful tenderer for the construction being Mr James Elphingstone.

By the end of 1861 the lighthouse lantern and apparatus had been transported from Sydney. The tower and the cottages were built of Hawkesbury River sandstone brought to the site by ship. Construction work was supervised by M Moriarty, Engineer-in-Chief for Harbours and Rivers Branch within the Colonial Architect’s Office. The design is attributed to the Colonial Architect, Alexander Dawson.

The works were completed for the Lighthouse’s commissioning in 1862 at a cost of under eight thousand pounds. The tower as constructed is 22 metres, its walls at the base being two metres thick.

The three associated cottages were designed and constructed as a terrace in the Victorian Gothic style, with solid stone party walls and external walls of approximately half a metre thick. The group is unique in NSW as the only time all three Keeper’s cottages were joined into a single building. A single pitched roof clad in slates extended over the building, continuing over wide verandahs around its perimeter. The Head Keeper’s quarters consisting of four main rooms, one featuring an octagonal bay, and connected by a central corridor. The Assistant Keepers quarters featured three main rooms. Each apartment had its own kitchen and storeroom in separate buildings at the rear. The building as constructed featured five chimneys with a total of ten fireplaces, high 3.8 metres ceilings and cedar linings in many of the rooms.

A small crane was erected on the northern, sheltered side of the point to take supplies from ships at one of the few safe landing spots. The residents had no regular supply of food as they were dependant on what was brought by sea. This was later supplemented by growing of fruit and vegetables on a small farm which the Keeper’s set up in a sheltered section of the island. Livestock were brought over and kept in a paddock to the north of the Lighthouse cottages. Two spherical underground water tanks provided the water supply to the complex.

With three keepers and their families living on the island, there were sufficient children for the employment of a full time teacher. Classes were held in the lighthouse tower, at the ground level.

While the Port Stephens light was exhibited in 1862 another light was established on Nelson Head in the inner harbour in the 1870s. By the 1880s a more sturdy second light was operational and associated complex developed. This has also ceased formal operation and the old cottage is now a museum and tea house. The Volunteer Coastal Patrol have a lookout facility behind the cottage.

The connection of the telegraph link to the Lighthouse in the 1880s provided the complex with immediate communication with the outside world. This also provided the only link for the Nelson Bay Post Office. Wires on poles came across the sand spit joining the island to the mainland, however this link was wiped out during the Maitland gale in 1891 which also swept away the sand spit.

It appears that the cottage building also suffered some damage as a result of the gale and that major repairs were undertaken to the residential complex at this time. It is likely that the original slate roof was changed to tiles, a drawing dated 1901 depicts a tiled roof as existing at this time.
In 1912 a report on the condition and efficiency of the lighthouse recommended that two Light Keepers be withdrawn, retaining one Light Keeper and his family. This was not acted upon until 1922.

In 1922 the original kerosene lamp in the light was replaced by a Dalene acetylene lamp. Typically as the technology within the complex improved three Keepers were no longer required and the lighthouse staff was reduced to two Keepers.

Mains power was supplied to the site in 1960 with the laying of a submarine cable backed up by a diesel generator houses in a generator room in the basement of the lighthouse tower. In 1973 a new lantern and dome were installed and the light became fully automatic and as a result all of the staff were removed. Mains power has since been disconnected and replaced with a solar powered system with battery storage.

The Department of Transport at the time of destaffing the station in 1973 decided that maintaining the Lighthouse Keepers cottages would be too costly and that their removal would be more practical. It was decided that all surplus elements such as the original logs and drawings and original furniture should be destroyed. They were subsequently burned by the Department's employees at this time. Prior to the proposed demolition of the building one of the last relieving Keepers and a local businessman mounted a successful campaign to save the residential building. As a result, in 1974, the National Trust of Australia (NSW) were given the lease to the building and assumed responsibility for its conservation.

The National Trust appointed a resident caretaker who also provided low key interpretation and information regarding the complex.

In March 1991 the caretakers of the residence ended their tenure. It was partly due to the poor access from the mainland, no funds and severe weather conditions that the Trust operations ceased. Within months vandals damaged the building and a fire ravaged the building causing substantial damage, including the complete destruction of the roof and loss of all flooring and internal joinery.

Since that time a local group, Point Stephens Lighthouse Friends, who are no longer active, voluntarily cleared the site of debris and rallied for the reconstruction of the cottages. There is a new community group called the "Friends of Point Stephens" who undertake bitou bush control work in and around the ruins and along the walking tracks.

Security fencing was erected to protect the remains of the building. The lighthouse is currently unmanned and annual maintenance activities were conducted by AMSA until the handover to the State and NPWS in 1997.

Exterior catch up maintenance to the Lighthouse Tower was undertaken in 1998 at a cost of approximately $100,000.
2.2 Description of the Setting

THE COASTAL EDGE

Point Stephens forms a peninsula, connected by a sand spit near the southern entrance of Port Stephens. Port Stephens is located 190 kilometres north of Sydney and 45 kilometres north east of Newcastle, it is a major coastal recreational and holiday centre for the people of Newcastle and Sydney. There are numerous resorts and holiday villages along the southern shores of the waterway and others spread around the nearby coast.

The southern headland of Port Stephens features Tomaree Head at its north eastern point and a number of bays and beaches curving round to Boat Harbour and Fisherman’s Bay at its southern points. Point Stephens is located south east of Tomaree Head. It is actually an island connected by a sand bar to the headland and encloses the south facing Fingal Bay and a number of smaller bays and beaches on the east facing coastal stretch to its north to Tomaree Head. The sandbar returned following the 1891 storm but in a slightly different location.

Tomaree National Park occupies most of the headland and part of Point Stephens. A vegetation survey of the Park has identified several rare species including Melaleuca groveana.

There are a number of islands off the coast and visible from the lighthouse include Cabbage Tree Island, officially known as “John Gould Nature Reserve”, an important and rare nesting habitat for the Gould’s Petrel.

Wartime activity in the early 1940s saw Port Stephens used as major training centre for Australian and US military. To protect the entrance to the harbour a series of gun emplacements and torpedo launching ramps were constructed around the Tomaree headland. The area apparently also featured an early radar station. The buildings of the existing mental hospital at the foot of the headland commenced as part of the WW2 facilities. ‘Fort Tomaree’ is now included in the National Park area and provides another cultural dimension to the area.

The Tomaree headland also features a number of walking tracks, however the actual coast is too rugged for a coastal walk. There is a dramatic transition of topography along the coast, with tall headlands and steep cliffs.

Whale and Dolphin watching are popular waterborne vacation experiences reinforcing the strong level of sailing activity. There are at least 16 Dolphin operators who work both inside and outside Port Stephens, known as a safe and easily navigable waterway. At least one operator drops passengers onto the beach at the northern side of the spit which connects to Point Stephens.

Shoal Bay, Nelson Bay and Salamander Bay are the principle residential areas along the southern shores, known as the Tomaree Peninsula, while Raymond Terrace to the south west is the administration centre of the area.

There are a number of wrecks in the vicinity including the FLORENCE IRVING wrecked in the southern bay of Point Stephens in 1877. Before the light was exhibited a number of vessels misread the island and Fingal Bay on its southern shore for the entrance to Port Stephens.
THE HEADLAND & ISLAND

Point Stephens is effectively an island. While it is connected to the mainland by a sand spit several hundred metres long, the spit goes underwater at high tide and can be below water permanently for long stretches of time. Early maps show it with larger dimensions than now and located slightly further north. The island itself features a number of rocky bays and islets. The Lighthouse Precinct is located near the south eastern point of the island. To its north is Shark Bay and a small island called Shark Island.

The views from the spit and the lighthouse are dramatic. The tracks on the island are wide and have been used in the past to resupply the lighthouse.

The headland peak at Tomaree is considered within the Service as one of the top ten sites within NSW for visitor attraction and accessibility. The view from the top, over Port Stephens, the harbour entrance and coastal islands is extensive. Point Stephens lighthouse is visible from this position, at a distance of about four kilometres.

There is considerable bushland on the island which is generally in good condition. Weed and Bitou Bush are mostly close to the walking trails and reflect typical weed infestation patterns being associated with long term human settlement. There are substantial grassed areas surrounding and within the Lighthouse precinct. These are progressively responding to long term weed control measures. There is evidence of old food production gardens around the lighthouse precinct and of citrus and other trees along the central track from the sand spit to the Lighthouse.

There are wallabies and a variety of other native fauna on the island as well as feral foxes, possums and a great deal of bird life. Fox control is undertaken. The lighthouse originally ran cattle for food and grass control. However only two remained when the NPWS took control of the island and the last of these died in May 1998.

There was an old wharf on the northern side of the island. Only several brackets and stumps remain, but the concrete path near the wharf is still in reasonable condition. The wharf is in a location where the sea conditions are not conducive to the landing of small boats and would not be suitable for a future wharf.

There is a swimming beach on the northern side of the island, with suggestions that the swimming hole may have been an Aboriginal fish trap. It is easily accessible from the main track. The southern end of the island is generally less accessible than the north and therefore less disturbed.

The track across the island from the sand spit is in reasonable condition although the scrub vegetation tends to encroach on the path. A portion of the track passes through a clearing that was made during the shooting of a movie on the island some years ago.

There are currently no toilet facilities on the island, nor any provision of fresh water.
ABORIGINAL RESOURCES

There are no listed sites in the area however local information indicates that there are known sites which apparently have been recorded or registered. Potential sites include middens, camp sites, possible ceremonial site and scarred trees.

THE LIGHTHOUSE PRECINCT

The island is predominantly covered by bushland however a cleared grassed area and line of post and wire mesh fencing defines the Lighthouse Precinct, located on the eastern promontory of the island.

At the time of the construction of the lighthouse complex the spit was high and dry and covered in bushes. However a storm in 1891, known as the "Maitland Gale", washed the spit away. Access today to the Island is to walk across via the spit at low tide and by boat when the seas are calm.

Photographs from the 1940s indicate that the landscape was open grassland around the immediate precinct and there was swampy ground behind the houses.

Today wire mesh fencing surrounds the burnt out cottage remains located north of the Lighthouse tower. In the area behind the cottages are a number of associated elements such as privy and store structures, tank stand and telegraph pole. A rubbish tip area is also located north of the cottages.

Within the wire mesh security fencing there are some isolated clumps of remnant domestic planting overgrown and dominated by grasses. Dry stone walls remain as evidence of the terracing at the rear of the cottages.

The Lighthouse tower is located at the southern tip of the Precinct. This section of the Precinct also features a stone wall and base for the former flagstaff, fuel shed and more recent features, the helipad (added in the 1970s) and solar panels generating power for the light.

There are two large underground water tanks however these have not been tested for pollution and there has been no water collection at the place given the condition of the buildings. There is currently no regular source of power other than solar panels for the lighthouse and a backup generator in the lighthouse tower.

A dirt track also runs along the western edge of the Lighthouse Precinct.
2.3
The Constructed Image

The principle structures located within the Lighthouse Precinct include:

- The Lighthouse
- Combined keeper's residence building
- Several other smaller stores and associated structures including fuel shed, helipad, solar panels, stone walls and remains of garden, telegraph pole, tank stand, septic tank and remains of wharf.

THE LIGHTHOUSE TOWER

The tower is circular in plan with an internal diameter of just over three metres. The interior is divided into four storeys and all of the floors and connecting stairs are made of iron. The tower features a generator room with separate entry located in its basement with the main entrance to the upper levels of the tower occurring at the first floor level. A flight of external stone steps lead to the landing and entry. The basement area was originally used as an oil store for the light and had most recently been used as a generator room.

The elevation of the tower is unusual featuring a bell curve elevation with a concave batter. It is the only lighthouse tower in NSW to feature the so-called "wave swept" style of the Eddystone Lighthouse. The gallery and the lantern is of stone and originally featured an iron railing. The tower walls are carried up above the lantern floor to support the metal framework for the glass optic. The original lantern was a catoptric design manufactured by H Wilkins & Co., Lighthouse Engineers, London, with 12 metallic parabolic reflectors at the back of each lamp on a revolving iron frame. The lamps were arranged into four groups of three lamps each. Two groups were white and two groups with red globes.

A report on the condition and efficiency of the lighthouse dated 1912 noted that the tower was in good condition. A new handrail had been installed to the tower steps in 1903. There was however some criticism of the apparatus, noting that while it possessed a fairly distinctive character it was obsolete and of low power. The alternate red flash was visible only half the distance of the white, given false impression to the navigators.

A recommendation was subsequently submitted outlining that the red shade be removed converting the light to white flashing every minute and at a later stage replacing the light with a modern automatic quick flashing dioptric light showing three flashes in quick succession.

Conversion of the light was finally made in 1922, converting to a Dalen acetylene dioptric light which increased the intensity of the light.

In 1932 the original Wilkins handrails and stanchions of the gallery were replaced by a steel pipe handrail.

Electricity was supplied to the station in 1963 and in March 1973 the station was automated with the installation of a fibreglass lantern, hexagonal lamp array and rotating pedestal. This effectively reduced the height of the tower to approximately 20 metres. The 1932 gallery rail was retained together with the lower part of the Wilkins lantern house.

In 1990 the light was converted to solar power due to faults in the power supply and problems with the diesel alternator.

The lighthouse tower is accessible and managed by NPWS. It now only serves local Waterways traffic. Given the cast iron circular staircases and the pipe handrail rangers ensure that small groups are closely supervised and that no young children are allowed into the walkway. A maximum of six people at a time are allowed into the lighthouse tower and only when there are two rangers present.

LIGHTHOUSE KEEPER'S COTTAGES

Quarters for the accommodation of the Keepers was originally provided in a terrace of three single storeyed cottages. The Head Keeper's cottage featured a total six rooms and the assistant each had three with kitchens, storerooms and privies.

The completion date for the cottages may have been slightly later than the lighthouse as building supplies were still being sent from Sydney after the official opening of the light. The supplies including paint in the colour of dark green, black, yellow and burnt umber.

The cottages feature stone walls and chimneys (the same imported stone as the Lighthouse. Although the internal walls were rendered and painted the quality of the stone cutting and laying is excellent. Externally the stone was probably originally dressed and later some were either rendered and painted or simply painted.

The residences were served by a single septic system which appears to have discharged via
filtration bed towards the north east of the property.

In 1901 major repairs were carried out to the roof and may have included the replacement of the original roof slates to terracotta tiles.

In 1912 a report on the condition and efficiency of the lighthouse noted that the building was in good condition and made recommendations regarding the Lighthouse tower and staffing levels at the complex. In 1922 the staffing levels were reduced from three keepers to two, however it is not clear exactly what impact this had on the residential buildings.

A number of photographs taken in the 1950s show a rear addition to the building with a skillion roof and part of the verandah infilled providing additional spaces.

Following automation in 1973 the two remaining keepers were withdrawn and the building was declared surplus to the need of the Department. The National Trust of Australia (NSW) was given the lease of the building after some debate and became responsible for its conservation. A caretaker in turn leased the building and was in residence when the mains power was converted to solar power in 1990.

However the caretaker’s lease expired in early 1991. Shortly after vacating the triplex building was vandalised and subsequently burnt out. The building was not totally destroyed with walls and some verandah slabs remaining. The remaining structure also includes some badly deteriorated chimneys and some timber beams that may be part of the original structure.

In 1992 security fences were installed after some clearing of the site and Australian Construction Services stabilised some of the building elements including remnants of the internal render and external paint finishes and collapsed carved stonework from the main gable and chimneys.

A Structural Report by Hughes Trueeman Reinhold (1997/8), outlined a number of deficiencies in the building. The report identified some weathering of the sandstone, particularly at the south eastern corner, cracking in several of the lintels which are potentially dangerous and recommended should be repaired, minor examples of mechanical damage and considerable evidence of rising damp.

The Report outlines that at minimum the roof should be reconstructed in order to stabilise the walls and chimneys and provide some rainwater drainage and therefore prevent further water damage and deterioration. Other “essential structural elements” were listed and included door and window joinery new floor and work to lintels and rising damp problems in the building.

The Report also discussed alternative temporary stabilisation methods using scaffolding. It appears from the purely indicative costings that temporary measures could prove equally costly to the more permanent measures.

Whilst debate on the reconstruction options continues the buildings currently remain enclosed by steel mesh fencing.

OTHER FEATURES & ELEMENTS

A number of outbuildings occupied the area behind the cottage building. These were essentially service structures, kitchen, privies and stores and mostly destroyed in the 1991 fire, only parts of the timber walls remain.

Another privy located to the north of the cottage building was possibly constructed c.1930s when the size of the compound was increased. The fabric of the brick privy remains in good condition and features a gabled roof clad in corrugated asbestos sheeting.

Further north of the cottage building is the workshop building. Possibly constructed c.1950s it is assumed it replaced earlier workshop structures in this area. The structures features flat and skillion roof and also houses the electricity generators at one stage. The former generator/workshop room is an isolated structure located at the northern end of the property away from the residences. Although none of the machinery is present concrete mounting blocks remain. The structures has been vandalised and most recently used by fishermen as an overnight cabin. It remains in very poor condition.

There are a series of drystone walls in the vicinity of the lighthouse which apparently date from 1865.

The nearby flagstaff has been removed but the footings and stay rings survive. Part of the original establishment, it was situated south of the lighthouse adjacent to one of the stone retaining walls.

Two other timber framed structures also remain including a former fuel shed assumed to be constructed c.1970s and located south of Lighthouse on the point.
A single above ground fuel bunker is located on the southern side of the property, approximately 40 metres away from the lighthouse. The bunker is of brick construction with a concrete roof and floor and has been directly constructed on a rock outcrop.

The concrete helipad was constructed c.1970s and is located to the west of the lighthouse.
2.4 Significance

The Point Stephens Lighthouse is unique in NSW in its location and assemblage of buildings in a spectacular and geographic setting and is one of the largest of four extant lighthouses built in Colonial NSW prior to 1862, albeit with ruined cottages.

It is an important and representative example of the so called "coastal highway lighthouses" that were erected along the NSW coastline between 1862 and 1903.

HISTORIC SIGNIFICANCE

The Point Stephens Lighthouse is unique in NSW in its location and assembly of buildings associated with the lighthouse. It contains the only lighthouse in Australia with a wave swept tower base and ground floor entry of its type and contains a rare example in Australia of a combined terrace of three keeper's quarters.

Point Stephens is one of about six lighthouses in the then Colonial boundaries of NSW, constructed prior to 1862. Of these Point Stephens is the most northern on the coastline of NSW. That the light was intended to assist vessels entering the port and demonstrates the expansionist aspirations towards Port Stephens in the early years of the Colony.

AESTHETIC SIGNIFICANCE

The Point Stephens Lighthouse occupies a headland which has landmark qualities and is highly visible from the adjacent coastal area. The lighthouse tower is elevated on the most eastern point of the headland. The point is made more prominent at high tide and during storms when the sand spit disappears from view and adds to the romantic impression of the site.

Point Stephens is the largest and most accomplished of the lighthouses designed by Alexander Dawson. It is one of the most architecturally accomplished designs in NSW. Its sweeping base and external stair are a sophisticated and unusual feature were typically associated with English lighthouses of the late 18th century and also used at Gabo Island in Australia.

The lighthouse is constructed of Hawkesbury sandstone and rises approximately 20m above its base. The internal iron stair structure is finely made and features the earliest extant example of an iron staircase in NSW.

The residence is unusual, unlike most other lighthouse keepers residences these are built in a terrace of three in Victorian Gothic style, with Head Keeper and two Assistant's residences under the one roof. The design and layout of the building is elegant and featured a verandah under the main roof of the structure, a device to mitigate the wind and not a typical feature of houses constructed in the 1860s.

The landscape of the Point has romantic quality derived from its rugged terrain and distinct geology. The lighthouse is a focal point of that terrain, it is elevated and cleared and contains the only major European artefact in the visible landscape. The headland differs greatly to the interior landscape of the bay.

SOCIAL SIGNIFICANCE

The Lighthouse is socially significant for over 100 years of occupation and use, housing a number of Keepers and their families. This is emphasised by the early establishment of a school within the complex.

More recently a number of groups have been associated with the Precinct and have lobbied to protect its heritage, both cultural and natural resources. These groups have rallied a diverse range of locals and interested parties who have been instrumental in saving the buildings from demolition and further deterioration.

SCIENTIFIC SIGNIFICANCE

The lighthouse precinct is of considerable industrial and potential archaeological significance in its ability to demonstrate its evolution and development.

SIGNIFICANCE TO ABORIGINAL PEOPLE

The significance of the Lighthouse site for the local Aboriginal community relates to the island on which the lighthouse sits and not the lighthouse ruins and appears to relate mostly to economic use.

The Aboriginal community has utilised the island and it has ceremonial significance to them.
ELEMENTS OF PRIMARY AND CONTRIBUTORY SIGNIFICANCE

Grading the comparative significance of various elements or characteristics of an historic place or building is a useful management approach to support future programmes of detailed fabric or artefact conservation.

The majority of the conservation management plans prepared for AMSA included a graded table of significance for the various components of the lighthouse complexes, including landscape and archaeological features and of individual buildings.

The subsequent allocation of graded levels of significance in some of the CMPs is considered by this consultant to be overly complex and not beneficial in terms of providing a clear background to the conservation and management of building fabric or other elements.

The conclusions reached by the consultant team preparing this overall Conservation Management Plan have taken a different emphasis.

The characteristic considered to be the most important in relation to the NPWS Lighthouses is the manner in which they have evolved progressively while retaining their essential integrity and significant features. Accordingly a three tier significance rating has been adopted.

- Characteristics of Primary Significance
- Characteristics of Contributory Significance
- Characteristics of Little or No Significance.

Primary Significance:

All those elements and features that relate to the initial construction and operation of the particular Lighthouse and its supporting buildings and infrastructure. It includes the pre-existing topographical and landscape characteristics, initial cultural landscape features and sites of Aboriginal cultural significance.

Contributory Significance:

All those elements which relate to the subsequent use and development of the place as an operational Lighthouse, right down to the period when they were transferred to NPWS. It includes subsequent natural and cultural landscape features and post contact period sites and places of Aboriginal cultural significance.

Elements Of Little Or No Significance:

Generally only those items which relate to the subsequent re-use and development of the place after it was transferred to NPWS.
3.0 Constraints & Opportunities

This section confirms the listing status by various heritage agencies for the Point Stephens Lighthouse and summarises the views of relevant community members or representatives.

Refer to the main Plan for guidance with regard to the appropriate responsibilities and actions to be taken in relation to these listings and viewpoints.

3.1 Heritage Recognition & Listing Status

NATIONAL AGENCIES

The Point Stephens Lighthouse is registered on the Register of the National Estate (RNE) administered by the Australian Heritage Commission.

STATE AGENCIES

The primary conservation and management framework for the Lighthouse is the NSW National Parks and Wildlife Act. The site of the Lighthouse complex is not currently gazetted within the Tomaree National Park, but should be added to it. The Park is managed under the Tomaree National Park Plan of Management. This will need to be amended in accordance with the recommendations of this Plan.

Point Stephens Lighthouse Group is listed in Schedule 2, items of Regional Environmental Heritage, in the Hunter Regional Environmental Plan 1989 - The Hunter's Heritage.

Point Stephens Lighthouse is contained within the NPWS s170 Heritage and Conservation Register, under the NSW Heritage Act and Heritage Amendment Bill 1998.

Point Stephens Lighthouse has been promoted by NPWS for listing in the State Heritage Register.

LOCAL GOVERNMENT

The Point Stephens Lighthouse is listed as a heritage item in the Port Stephen Shire Council Local Environmental Plan 1987. The lighthouse precinct is zoned 7(01) Environmental Protection of Coastal Land. Any major reconstruction of the buildings should be referred to Council for advice, even though the Service will be the consent authority, once the site is gazetted.

NATIONAL TRUST OF AUSTRALIA (NSW)

Point Stephens Lighthouse is classified by the National Trust of Australia (NSW).

ABORIGINAL COMMUNITY

The area is associated with the Worimi Tribal Group. Native Title claimant groups in the area include representatives from the Worimi people, who have affiliations with Fingal Bay and Bagnalls Beach, two claims which do not include the Lighthouse Island, and the Miangal Norri Tribal Elder Group who at present have no claims.

No sites are currently on the NPWS register, however local information including NPWS suggest that there are known sites which apparently have not been recorded or registered. A more comprehensive survey is required.

It seems that the significance of the site is related to the Island, not the Lighthouse and appears to relate mostly to economic use. Ceremonial importance may be attached to the Island. The area is currently used for informal summer camping by groups of young people.

Consultation with the Aboriginal community is presently informal and this relationship is appreciated by the Aboriginal community. The consultation is localised and largely limited to matters relating to site management. Major issues concern access and site protection and management. Miangal Norri principal concern is environmental issues.

The community have expressed a desire for joint management of the Island concerning land management, site protection, cultural tourism and community access. They also desire that the management style to remain informal and the management structure to be reviewed.

LOCAL COMMUNITY

Point Stephens Lighthouse is highly regarded by the local community. While it does not have the immediate visual relationship with the nearby holiday village as does the Cape Byron lighthouse, there is strong community support for its care and management.

There is considerable local awareness and support of activities at the Lighthouse Precinct. The usefulness and the security of the light at
Point Stephens has never been questioned by the local maritime community who in 1989 raised $30,000 to convert the light to solar power after the failure of the submarine cable.

The National Trust of Australia (NSW) were involved as custodians of the site prior to NPWS involvement. They subsequently appointed local custodians to take care of the cottages and operated a museum type enterprise which generated much interest prior to the 1991 fire.

Since the fire, one local group in particular, Point Stephens Lighthouse Friends, have been lobbying for the preservation, conservation and reconstruction of the damaged Keeper’s quarters.

The Point Stephens Lighthouse Friends recommended that a Trust be formed to officially protect and administer the Point Stephens Lighthouse Reserve. The Trust should suitably represent all parties concerned, both governmental and community based, and that recommended that the community itself is represented by two members elected from the Point Stephens Lighthouse Friends group.

Local response in favour of the reconstruction of the cottages has been immense. A report surveying local opinion, compiled separately by NSW University students as part of their Geography Major, noted the strong local support for reconstruction of the cottages and protection of the surrounding 29.4 hectare reserve by its inclusion into the Tomaree National Park.

TOURISM OPERATORS

The tour boat operators currently have a dolphin watch and ecotour emphasis however the local tourism industry has shown some interest in the Lighthouse Precinct and has seen the potential of the complex generally supporting the reconstruction of the residences.

One group in particular have also prepared a feasibility study outlining the possible and potential tourism scenarios available, essentially involving local boat operators. The concept of the feasibility study entails the reconstruction of the cottages providing for use as both holiday and workshop accommodation, allowing one cottage to provide accommodation for a manager/caretaker.

Reliable access to the Island is by boat only. The study outlines that there are at least four vessels at Nelsons Bay suitable and interested in delivering and recovering guests to and from the Island. The authors of the feasibility study run a daily Ecotour adventure cruise voyage past Point Stephens in a sailing catamaran. They point out that it would be possible to convey guests and is certain that other vessels would be interested in running regularly to the Island should the cottages be reconstructed and run as a guest house.

3.2 Conserving the Cultural Resources

THE CONDITION OF THE BUILDINGS & STRUCTURES

NPWS undertook conservation works to the tower in late 1998 at a cost of some $100,000. The work included replacement of the galvanised handrail with stainless steel, replacing of broken hinges to the balcony access door and rehanging of the main door, removing of PVC guttering to the light-casing; painting and general maintenance. AMSA were selected by NPWS to undertake the work, as they have the expertise.

The ruinous condition of the residential building is of some concern. The stone walls are generally still standing however as previously described the stabilisation of the building fabric and elements is a priority. In addition the security fencing requires repair and to be made more secure.

The other small free standing former generator shed is also in ruinous condition, having been extensively vandalised in recent years.

The track across the island from the sand spit is in reasonable condition however requires some improvement and clearing of the encroaching scrub. There is a clearing adjacent to the track which may be an Aboriginal Bora ring and requires additional research.

CULTURAL AND NATURAL LANDSCAPES

Point Stephens contains both natural and cultural landscape which appeal to a variety of user groups.

The immediate coastal zone is largely a natural landscape. From the landward side of Point Stephens, there is virtually no evidence of human settlement to be seen, with the exception of some pines at Nelson Bay and a few coastal houses at Fingal Beach. Virtually all of the remainder is managed under the Tomaree National Park, providing a superb natural backdrop and landscape to the Lighthouse Precinct.
Fingal Bay and the associated beach and attached spit are significant natural landscapes providing pedestrian access to the Island at low tide and heightening the experience of the journey to the Island.

The Island itself generates great interest when viewed from the adjoining coastal areas. It is prominent and naturally high point which draws attention to the cultural landscape of the Lighthouse Precinct.

The headland and Island zone also predominantly natural, the headland peak at Tomaree is considered a prime site within NSW for visitor attraction and accessibility.

The place feels like an island especially with the nature of the sand spit. This enhances the sense of isolation for the landscapes including the Lighthouse Precinct and provides added value to the experience of these landscapes.

There is considerable bushland on the island in addition to a number of animals. There is a swimming beach on the northern side of the island, with possible Aboriginal associations that add to the cultural interest in the Island zone.

The Lighthouse zone is a modified natural landscape zone and is fairly well defined by its open and cleared nature and presence of building structure and elements. However the cultural aspects are not restricted to the Lighthouse zone. There is evidence of old gardens around the Lighthouse precinct and of citrus and other trees along the track from the sand spit.

These small portions of cultural landscape, areas and remnants of the self sufficient gardens, has the potential to illustrate the struggle for early settlement of Australia by Europeans. In many other places, subsequent surrounding development makes this picture less clear.

ABORIGINAL CULTURAL RESOURCES

The Island contains a number of middens and other evidence of Aboriginal culture. The island has been utilised by the Aboriginal community and has ceremonial significance.

No sites have been formally recorded or registered. There is a strong Aboriginal community in the region and a number of issues will need to be worked through.

HISTORICAL ARCHAEOLOGICAL RESOURCES

The Lighthouse Precinct has the potential to yield information related to the initial construction of the complex and prior and subsequent use and development of the site through the remaining material.

After the fire in the Keeper’s quarters a substantial amount of material and debris was cleared however once the weed has been removed there should be an archaeological survey for building artefacts that may be still lying around the immediate vicinity of the cottages.

NAVIGATIONAL AIDS

The Lighthouse is now only used for general and local Waterways traffic and the tower is directly under the control and management of NPWS.

3.3 Other Management Issues

PRECINCT & SITE MANAGEMENT

As with many of the NPWS lighthouses, the issue of access is another major factor at Point Stephens. It can easily be regarded as a negative factor in establishing any revenue generating activities on the site, but is a positive reinforcement of the sense of adventure and isolation. The provision of access may need to be an integral component of any organised activity package developed for the place.

Increased public access to the lighthouse precinct is an objective for NPWS management staff. This will naturally increase demands for the buildings and site to be well maintained.

Improved signage is required to warn people who cross the spit on foot about the tidal risks. There are regular but infrequent instances where people need to be rescued at high tide.

The lighthouse precinct is now within the care and control of the State, but has yet to be gazetted into the National Park. The results of this study will assist in that process.

There was an old wharf on the northern side of the island. Only several brackets and stumps remain, but the concrete path near the wharf is still in reasonable condition. The wharf is in a location where the sea conditions are not conducive to landing small boats and would not
be suitable for a future wharf.

There is a very pleasant swimming beach on the northern side of the island, with suggestions that the swimming hole may have been an Aboriginal fish trap. It is easily accessible from the main track.

There is currently no toilet facilities on the island, nor any provision of fresh water. There are large (2 x 20,000 gal) underground water tanks but these have not been tested for pollution and there is no water collection in place, given the damage to adjacent buildings. Provision of visitor facilities needs to be investigated. There is no regular source of power, other than the solar panels for the lighthouse and a backup generator in the lighthouse tower. There is good mobile phone service available from the lighthouse precinct.

Vandalism is a continuing problem, given that the site is relatively isolated and rangers can only visit the site about twice a month in the slow periods. Staff generally only visit the site for specific purposes, such as clean up, weed control programmes, construction or maintenance projects.

BUILDING CONSERVATION AND RE-USE ISSUES

The biggest issue is the deteriorated and burnt out state of the residence building, following the devastating fire in March 1991. Conservation in some form is essential. These cottages are the oldest cottages associated with any lighthouse in NSW and are the only ones in NSW which were erected in a single group.

Remnants of internal render and external paint finishes remain, as does some of the collapsed carved stonework from the main gable and chimneys. A preliminary study will be necessary to record the building, note surviving profiles and fragments and to assess the various conservation issues before reconstruction commences.

Two internal lintels were noted in May 1998, as having slipped since the previous inspection. These need to be propped as a matter of urgency.

The cottage building is heavily invested with weed, which may be affecting the stability of the structure and obscures key information. The weed should be removed as a matter of urgency. The rear yards are equally invested with weed and long grass. This should also be removed as a priority. The security fence also needs to be strengthened and kept in good order.

There is concern over the stability of the remaining chimneys, stone deterioration from rising damp and the collapse of several lintels over internal doorways. A report by Hughes Trueman Reinhold highlights the need to stabilise the chimneys in the near future, as the earlier attempt with brickwork cannot be relied upon. That report indicated that the likely cost of long term stabilising scaffolding is not that much more than putting a roof back on, thus giving the process of potential reconstruction a good start and providing more protection for the remaining stonework. Any reconstruction of the roof would however require close research and careful design, following sound conservation principles.

One problem for any future reconstruction option is the availability of early documentary material. The Department of Transport apparently burnt all on-site documentation at the time when the demolition of the buildings was also planned. The only documentary material may now be in the hands of local people, including photographs of the building before the fire.

Access for building materials can be across the sand spit at low tide and by 4WD across the access track. The District is buying a barge to service the Myall Lakes Park area. It could be available if necessary.

The AMSA CMP recommended that the buildings be taken back to 1862 and interpreted as historic monuments. Such an approach is not considered satisfactory by this CMCTP, as the buildings have clearly evolved over time and should now illustrate their historical development.

The lighthouse tower is accessible. Given the cast iron circular staircase and the pipe handrail. Rangers ensure that small groups are closely supervised and no young children are allowed onto the walkway. A maximum of six people at a time are allowed into the lighthouse tower and only when there are two Rangers present.

Various people in Port Stephens, including Frank Future, are still keen to see the cottages "restored" and re-used for accommodation or an education centre. Their plans included adaption with rooms in the roof space, dormers and internal staircases, are not considered appropriate by this Plan, due to the recognised national significance of the cottage building.

Given the burnt out nature of the cottages, there is no potential for re-use or income generation with the buildings in their current condition. The only potential is to interpret them as a ruin. At
present, with the tall chimney stacks projecting above the stone walls, the buildings have a romantic ruin character. If the chimneys collapsed, as is likely, or were stabilised by extensive scaffolding, as is necessary, the romance would soon depart. Ruined gaols, such as Trial Bay, project a powerful imagery. Ruined cottages are less impressive.

There are a number of conservation options available for the ruined cottages. These range from do nothing but stabilise the ruins, reconstruct the roof for stability and long term protection of the stone walls, reconstruct the houses to an equivalent of their former nature and interpret that form, adapt the reconstructed form or rebuild the buildings in an adapted form, including additional spaces in the roof.

The conclusion reached by this plan is that the cottage building must be reconstructed to replicate their former external appearance and general internal room layout. They are too important on a national scale to be left in a ruinous state, as in this condition they lose most of their ability to interpret and present their significance. The recommended approach takes the view that the disastrous fire was an unfortunate calamity and should not be looked upon as part of the natural history and evolution of the cottages.

On this basis and given their importance, it is not appropriate to make major adaptions to the original building envelope to cater for a future new use. This approach would not adequately respect the cultural significance of the subject cottages, nor the fact that every other group of lighthouse buildings along the NSW coast has evolved in a manner which has largely retained the external form of its buildings.

Simple preservation of the ruined walls, while a valid conservation option, does not adequately respond to their importance and the opportunities to reveal their significance. The chimneys, in their current state are in danger of collapse. The provision of stabilising scaffolding is likely to be visually intrusive.

Reconstruction should be undertaken after a close examination of the surviving physical evidence and the documentary material available. Reasonable records were made by local people prior to the 1991 fire. Captain Frank Future of Port Stephens has indicated verbally that he retains such records and would be happy for the Service to make use of them.

In conjunction with the reconstruction of the external appearance and internal room layouts the cottages should be adapted internally to a mix of functions similar to that proposed for the majority of the other NPWS lighthouses. The buildings were designed to provide accommodation and to be used. The recommended philosophy is for the NPWS lighthouse cottages to be conserved by adaption in a manner which facilitates their interpretation to the public.

The outbuildings at the rear of the cottages should also be reconstructed and adapted for interpretation and overall conservation management support. They have all but disappeared, with the exception of one fibro clad laundry, which is in poor condition. Reconstruction will therefore be extensive.

The free standing generator building, located at some distance to the north, is also in very poor condition. It is timber framed and clad with a mixture of boarding and fibro. It is not the first building on this particular site and could either be reconstructed to one of its earlier forms or be rebuilt in another sympathetic form for another use.

TOURISM MANAGEMENT ISSUES

The place feels like an island, especially with the nature of the sand spit. This enhances the sense of isolation for the lighthouse precinct and it a positive attribute potentially adding to the tourist experience of the place.

Port Stephens is a major holiday resource for the people of Newcastle and Sydney who would be interested in the natural and cultural elements of the Island and Precinct have to offer. In addition to the Lighthouse, there are numerous wreck sites in the vicinity, remains of military activity on Tomaree Headland and a wide range of flora and fauna. The interpretation possibilities they present and the waterborne ecotourism aspects including the most popular whale and dolphin watching.

Nearby islands visible from the lighthouse include Cabbage Tree Island, an important and rare nesting habitat for the Gould's Petrel. There is thus scope for interpretation of other aspects of the coastal environment from the lighthouse precinct.

There are at least 16 Dolphin operators who work both inside and outside Port Stephens, where the entrance to the waterway is safe and easily navigated. At least one operator drops passengers onto the beach at the northern side of the spit. Sometimes the whale numbers off shore
are "so thick you can almost ski on them".

The Island already experiences some popularity, there can be several hundred people per day in the busy periods. The Discovery Ranger programme at peak holiday times has been successful, including both day time and night time spotlight tours.

There are opportunities for managed access to the island and the lighthouse precinct. There should be a level of unrestricted free access to the island, the overall precinct and a minimum level of interpretation. If an enhanced level of access is required, by way of a conducted tour, then the visitor should be expected to pay for this benefit.

There is the potential for a weekly promotional event on the island to increase the profile of the lighthouse in the local community.

If camping became an organised activity on the island, it will be necessary to provide environmental sensitive toilet facilities.

There is the potential for a picnic ground to be provided adjacent to the cross island track, but well away from the lighthouse precinct.

The NPWS office received several enquiries about accommodation after the Minister's May statement, indicating how effective a limited level of publicity can be.

It is unlikely that any commercial activity on the island, in relation to the lighthouse, will be seen as a commercial threat within the existing tourism activities of Port Stephens, as the recommended adaption approach is complementary to those tourism and holiday activities.

There is no secure parking area at Nelson Bay or Fingal Bay for people who may spend any time on the island in future. The existing coastal parking areas tend to fill up quickly in peak times.

Broughton Island, to the north of Port Stephens is currently a popular camping and holiday shack area, with regular cruise boat access from Nelson Bay and Tea Gardens. The District is developing a tourism plan to deal with this level of use.

RECENT OR CURRENT ACTIVITIES

A structural assessment of the ruined cottages was prepared in early 1998 by Harry Trueman of Hughes Trueman Reinhold.

An Environmental Assessment has been made by Woodward Clyde.

The local community volunteer group has spent a lot of time on the walking trails across the island. Their on-going commitment is being managed to ensure that their enthusiasm is not exploited.

A vegetation survey of the park has identified several rare species, including Melaleuca groveana.

Completed maintenance on the lighthouse tower, included replacement of the galvanised handrail with stainless steel, replacing broken hinges to the balcony access door and rehang the lower main door, removing PVC guttering to light casing, painting and general maintenance.

Further funding will be spent this year, including aerial spraying for weed control, lighthouse maintenance, contribution to the CMTCP and Economic Feasibility Study.

Over the long term the weed will be progressively cleared.

There is a need for a counter to be installed on the cross island track to monitor visitor numbers.
4.0 Primary Conservation Policies for the Point Stephens Lighthouse

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part D of the Conservation Management and Cultural Tourism Plan, the following primary policies establish the essential conservation framework for the Point Stephens Lighthouse.

- The Point Stephens Lighthouse shall be retained and managed by NPWS as a key contributing component of the overall NPWS Lighthouse Collection.

- The Conservation Policies and Implementation Guidelines contained in the overall Conservation Management and Cultural Tourism Plan shall be applied, as appropriate, to the Point Stephens Lighthouse.

- NPWS shall gazette the Lighthouse site as part of the adjoining Tomaree National Park, in recognition of its complex cultural and natural significance.

- NPWS shall conserve and manage the lighthouse complex as a collection of fine historic buildings and supporting site features that clearly express its original functional role and which has gradually evolved since initial construction in response to progressively developed coastal navigation technology and organisational practices. Recognition and respect for the evolving development of the complex from 1862 until the early 1990s shall form a key basis for conservation and management of the buildings, technology, artefacts, archaeological sites and infrastructure. Refer to Section 17.1 of the main CM&CTP for the Conservation Principles related to fabric, features and associated artefacts of differing significance.

- Conservation of the Point Stephens Lighthouse shall protect, respect and where appropriate enhance the identified and closely interrelated characteristics of cultural and natural significance of the place, in its own right and as a component of a larger state, national and international network of late 19th and early 20th century lighthouses.

- All essential and outstanding catch-up repair and conservation works to the buildings and site elements shall be undertaken to the lighthouse tower within a period of one year.

- The ruined cottages and outbuildings shall be reconstructed to the equivalent of the pre 1991 external condition and internal room layout, with a period of five years. In the interim period, the remnant stone walls shall be preserved in-situ, the stone chimneys carefully dismantled and fallen stonework, along with other remnant items preserved in a secure store on site.

- The ruined small former generating building shall be reconstructed to its external appearance prior to 1991. Rooms or dormer windows in the roof or major external alterations to either the roof forms or the external plan of the buildings are not permissible, given the architectural significance of these cottages.

- Once repaired or reconstructed, the buildings and site elements shall be conserved by the implementation and long term continuation of a rigorous, cyclical and appropriate maintenance regime, starting immediately. This regime shall seek to maintain the buildings and site elements in a character and condition that equates to the time when the complex was an operating lighthouse facility, with a full time staff.

- NPWS shall conserve and manage the immediate site and setting as a modified natural landscape with important cultural landscape characteristics that clearly illustrate the development and occupation of the precinct as an operational lighthouse complex, from 1862 until the early 1990s.

- NPWS shall conserve and manage the wider Point Stephens Headland as a modified natural landscape with cultural landscape features that illustrate the layers of human occupation and settlement, including that by Aboriginal people.

- NPWS shall conserve and manage the Aboriginal heritage characteristics of the Headland in consultation with the relevant representatives of the local Aboriginal communities.

- NPWS shall conserve and manage the complex and its setting in a manner which communicates and interprets the multi-layered nature of its cultural and natural
significance to the general public.

- NPWS shall facilitate the on-going operation of the lighthouse tower by NSW Waterways as an operational navigation aid.

- NPWS shall conserve and manage the complex by means of adapting the interiors of the reconstructed cottages and support buildings to new uses which are identified in the site specific Interpretation and Tourism Plans and which are compatible with their evolved architectural and spatial characteristics and cultural significance.

- NPWS shall continue to conserve and manage the complex in the context of the Point Stephens Headland being a popular destination and lookout venue for whale watching. Internal adaption of the cottages and support buildings shall support approved uses associated with site management, interpretation and cultural tourism.

- Once reconstructed, NPWS shall utilise the Keeper's Cottage for a combination of site administration, interpretation, retail, food services and visitor facilities and as short term equitable holiday accommodation.

- With the exception of the reconstructed buildings, there shall be no new permanent buildings erected within the immediate Lighthouse precinct. The design and positioning of any future navigational equipment or energy source infrastructure shall be carefully considered to avoid or minimise any adverse impact on the heritage or visual characteristics of the overall lighthouse precinct.

- Construction of a new dwelling for on-site security by a ranger, is acceptable if is located in a portion of the island that is visually discrete from the lighthouse precinct, away from any Aboriginal or historical archaeological sites and the anticipated areas where the public will traverse or gather for passive recreation.

- NPWS shall severely limit the number of non Service 4WD vehicles that are permitted on the headland or in the vicinity of the Lighthouse cottages, to those that are part of approved visitor access arrangements.

- NPWS shall conserve and manage the Point Stephens Lighthouse in full recognition of the heritage and environmental management provisions of the relevant aims, objectives, standards and procedures of the Australian Heritage Commission, NSW Heritage Council, NSW EP&A Act, Regional and Local Environmental Plans, the National Trust of Australia (NSW), NPWS and good conservation practice as promoted by Australia ICOMOS.

- NPWS shall co-ordinate the marketing and promotion of interpretation and cultural tourism activities at the Point Stephens Lighthouse, with the overall NPWS Lighthouses collective resource by reference to the Lighthouses Marketing and Promotions Unit within the Community Relations Division.
5.0
Site Specific Conservation Policy Implementation

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part E of the Conservation Management and Cultural Tourism Plan, the following guidelines establish the essential implementation framework for the Point Stephens Lighthouse.

The Conservation Policy Implementation recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

These site specific recommendations are framed in the same categories as the Conservation Policies and Implementation Guidelines of the main Plan, for ease of cross reference.

5.1 Reference to Main CM&CT Plan

SHORT TERM

- Refer to the Conservation Policy and Implementation Sections of the main NPWS Lighthouses Conservation Management and Cultural Tourism Plan. All of the following policies and implementation recommendations should be read in association with the larger policy framework.

- Participate in the Service wide review and assessment of the CT&CMP.

MEDIUM TERM

- Give special regard to the NPWS management recommendations and other general policies contained in the CM&CTP. In this regard, ensure that close liaison is maintained with all relevant stakeholders, particularly those concerned with heritage management and tourism operations.

- Manage the site in accordance with general NPWS management policies and guidelines.

- Review and update the Tomaree National Park Plan of Management in accordance with the findings and recommendations of the final CT&CMP.

- Facilitate the co-ordination of the Point Stephens Lighthouse conservation management and cultural tourism activities with the remainder of the NPWS collective resource. In particular contribute experiences and lessons to the other Lighthouse managers through the Lighthouse Reference Committee.

5.2 Aboriginal Heritage Conservation Policy Implementation

SHORT TERM

- Review the findings of recent Aboriginal site surveys and the previously collected knowledge.

- Review the current consultation processes with representatives of the Aboriginal community.

- Prepare medium term plans for undertaking further site surveys which will enhance the overall understanding of the Aboriginal cultural resources.

MEDIUM TERM

- Undertake additional research and site surveys to expand the knowledge of Aboriginal cultural resources, particularly the Bora ring.

- Refine and expand the consultation process, with the local Aboriginal community.

- Maintain active liaison regarding any Native Title issues that may relate to the Headland and the Lighthouse precinct.

LONG TERM

- Continue active consultation with the Aboriginal community to expand the understanding of their cultural heritage and involvement with the management and cultural tourism programmes at the Lighthouse and the headland generally.
5.3 Landscape Conservation Policy Implementation

SHORT TERM POLICIES

- Remove and control weeds from within the ruined cottage building and the precinct within the security fence, as a matter of urgency.

- Once the weeds have been removed, identify any other urgent landscape works which may be required within the security fence or the wider lighthouse and headland curtilage.

- Continue weed management programmes.

- Continue existing fire management regimes as appropriate.

MEDIUM TERM

- Review and prepare an inventory of the important natural and cultural landscape features of the Headland and the Lighthouse precinct, which must be protected into the longer term, particularly by establishing defined precincts which reflect the natural and cultural layers of the landscape.

- Ensure that appropriate Aboriginal and historical archaeological research is undertaken before any major landscape management programmes are commenced.

- Complete landscape and vegetation surveys of the headland

- Prepare a fauna survey and other natural heritage inventory of the area.

- Prepare a weed management plan.

- Undertake upgraded weed management programmes on a cyclical basis.

- Prepare a fire management plan.

LONG TERM

- Periodically review the weed management plan and upgrade as necessary.

5.4 Built Environment Conservation Policy Implementation

SHORT TERM

- Complete any outstanding components of the catch up repair programme.

- Ensure emergency stabilisation of endangered masonry elements or carefully dismantle as necessary for longer term conservation.

- Remove all weed and other vegetation from the cottages and outbuildings, to reduce the likelihood of further damage to surviving building elements.

- Ensure the efficiency of the security fence around the ruined cottages.

- Carefully salvage fallen masonry elements and store in a secure and appropriate enclosure adjacent to the cottages.

- Record remnants of internal and external finishes and colour schemes.

- Undertake a documentary search to collate all available historical information about the cottages and the general precinct before the fire damage and subsequent deterioration.

- Commission a measured drawing and building fabric study of the extant cottages and their outbuildings.

- Commission an associated archaeological study of the collapsed building elements and the immediate cottage surroundings, particularly of pathways, steps and underground infrastructure.

MEDIUM TERM

- Implement a rigorous building maintenance programme for the Lighthouse tower.

- Commission architectural and structural documentation for the reconstruction of the cottages, in the context of any analysis of their re-use potential.

- Reconstruct the cottages and selected outbuildings to their former imagery and early character, to recapture their significance.
• Adapt the reconstructed cottages and outbuildings in the form which responds to the approved re-use strategy (see Building Adaption).

• Rebuild the isolated outbuilding in a form which reflects its current scale and massing, and in a manner which responds to an approved re-use strategy.

LONG TERM

• Ensure that a rigorous maintenance plan is implemented for all buildings.

• Consider long term use of AMSA skills for the maintenance of the Lighthouse tower.

• Repair or replace deteriorated elements of building fabric, generally by replacing like with like.

5.5 Historical Archaeology Policy Implementation

SHORT TERM

• Review known information regarding historical archaeological resources.

• Collect copies of relevant historical documentary material that may provide background research in future archaeological assessments.

MEDIUM TERM

• Formulate an archaeological zoning plan for the Headland, taking particular note of the linkages to the remote wharf and cultural planting.

• Undertake additional archaeological assessments of areas with known potential, particularly if development or infrastructure proposals are under consideration.

LONG TERM

• Ensure that any archaeological management activities are undertaken in accordance with the NSW Heritage Act and Service policies.

5.6 Lighthouse Precinct Conservation Policy Implementation

SHORT TERM

• Continue current programmes of low key site management

• Ensure that existing levels of supervision and security are maintained

MEDIUM TERM

• Upgrade cross island walking tracks and picnic areas in discrete locations

• Reconstruct the various fence lines and other cultural landscape features as determined by the site specific Interpretation Plan.

• Progressively monitor site safety issues. Upgrade as required, after consideration of likely impact on significant characteristics.

• Maintain general site security activities.

• Liaise with NSW waterways to ensure that the progressive introduction of new navigational technologies into the overall precinct does not negatively impact on the significant characteristics.

• Conduct feasibility study into the rebuilding of a new passenger landing wharf in the location of the earlier structure of elsewhere on the Headland.

• Conduct feasibility, and impact assessment. Progressively upgrade on-site infrastructure in accordance with agreed interpretation, cottage re-use, and cultural tourism activities.

LONG TERM

• Reconstruct the flagpole.

5.7 Building Adaption Policy Implementation

SHORT TERM

• Review the current levels of interest and support within the local community for the cottages to be conserved and re-used for
medium term interpretation and cultural tourism initiatives.

MEDIUM TERM

- Conduct a detailed feasibility study and impact assessment to determine the final form of the re-use of the cottages in a manner which supports the conservation objectives, interpretation programmes and potential cultural tourism activities established by this Plan.

- The feasibility should finalise the detailed internal planning approach to adapting the cottages to provide the range of interpretive, retail, food services, management support and short let holiday accommodation.

- Review the findings and recommendations of the study with the full range of stakeholders.

- Conduct a similar study for the future use of a rebuilt version of the free standing building to the north of the main cottage group.

- Prepare the necessary REF and supporting documentation, including heritage approvals.

- Submit and gain approval for the identified direction.

LONG TERM

- Ensure that any future building adaption programmes respect the architectural nature and spatial arrangements of the particular building.

- Ensure that any future programmes of re-use are undertaken in accordance with the recommendations of the site specific Interpretation Plan.

- Identify any likely subjects for oral history capture, from both the Aboriginal community and those who were part of the operational phase.

- Commission and implement a site specific Interpretation Plan, to be prepared within the framework of the NPWS Lighthouses Collective Resource Interpretation Plan.

- Determine and implement a preliminary interpretive signage programme which will not conflict with the full range of recommendations of the site specific Interpretation Plan.

MEDIUM TERM

- Implement the recommendations of the site specific Interpretation Plan.

- Implement oral history programmes.

- Implement image capture programmes

- In accordance with the Interpretation Plan, supplement interpretive signage within the precinct.

- Incorporate the nearby Fort Tomaree defence installations into the locality interpretation programmes of the Lighthouse.

- Incorporate the associated Nelson Head Lighthouse into overall interpretation programmes.

LONG TERM

- Periodically review and upgrade the site specific Interpretation Plan and interpretive activities.

5.9 Cultural Tourism Policy Implementation

SHORT TERM

- Continue the Discovery Ranger and other community support programmes for periods of peak visitation.

- Consolidate background information on visitor patterns and tourism opportunities for the Headland.
MEDIUM TERM

- Prepare a site specific tourism plan.

- Establish regular Lighthouse information and familiarisation programmes for the people who staff the Local Tourist Information Office.

- Liaise with local tourism operators to gauge the interest in providing tour packages to the Headland, either by controlled 4WD, on foot or by boat.

- Facilitate the development of agreed tourism activities by local operators, including cruise boat access for self catered picnics.

- Investigate and implement alternative arrangements for boat access to the site by the majority of visitors, particularly during peak periods.

- Continue providing carefully supervised tours up the Lighthouse tower.

- Periodically review and amend operator licences for the organised recreational activities that may take place on the Headland.

- Install a counter on the cross island track to monitor visitor numbers.

- Complete upgrading of the other beach cottages to provide additional holiday accommodation at no physical affect on the Lighthouse precinct.

- Facilitate the incorporation of the nearby Fort Tomaree defence installations into Lighthouse locality cultural tourism programmes.

LONG TERM

- Monitor cultural tourism programmes and general operation of the activities eventually installed into the cottages.
Supplementary Information

Smoky Cape Lighthouse
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Introduction

1.1
Relationship to main Conservation Management and Cultural Tourism Plan

This Supplementary Information on the Smoky Cape Lighthouse supports the NPWS Lighthouses Conservation Management and Cultural Plan. It provides site specific Building and Site Description Overview, with information and analysis to assist the relevant NPWS managers translate the findings and recommendations of the main Plan into the site specific issues.

This Conservation Management and Cultural Tourism Plan and this Supplementary Information supersedes the Smoky Cape Conservation Management Plan prepared for AMSA in 1994.

In accordance with the project brief, the information contained in Section 2 of this Supplementary Information has been drawn from the AMSA Conservation Plan but summarised and rearranged for consistency across the whole NPWS Lighthouses resource.

The information on Aboriginal heritage and its significance to Aboriginal people, is based on the research and discussions undertaken by Mary Dallas during the preparation of the main Plan.

The detailed historical background and building analysis contained in the AMSA Conservation Plan has been reproduced and is attached to this supplementary plan as reference material.
2.0 Understanding the Resource

2.1 Historical Background

ABORIGINAL MYTHOLOGY & USE

There is a long association with the Dunghatti people in this area. It is reported that the area was also the meeting place for the Dunghatti and two neighbouring tribes, the Biripai and the Gumbangur. The coastal strip in Hat Head National Park has importance to the community as camping sites and for economic resources. There were Christmas camps established south of the Lighthouse Precinct and present National Park camping ground. This Reserve was established especially for these camps however has now been revoked and made part of the National Park.

The area holds a number of mythological associations associated with the formation of the Smoky Range and other inland geographical and topographical features including the Macleay River. There are also a number of associations and depictions of the Smoky Cape Mountain. Other important stories refer to the Brooongun gutti, a huge wombat who came from Point Lookout down the coast, and Gulgong an egg laid in the water east of the jail.¹

A burial and two middens are registered as being located on the Cape. There may be additional sites in the area. Potential sites include middens, camp sites, burial, possible Bora Ring, scarred trees, contact sites and Christmas Camps.

EUROPEAN DISCOVERY & EARLY SETTLEMENT

The South West Rocks area was well known for many years because of its prominent coastal geography. A journal entry recorded on Sunday May 13, 1770 by Captain James Cook describes the setting, longitude and latitude and a point “or a head land, on which we saw fires that produced a great quantity of smoke, bore W. distant four leagues. To this point, I gave the name of Smoky Cape; it is of

a considerable height, and over the pitch of the Point, is a round hillock; within it are two others, much higher and larger and within them the land is very low”.

Earliest European contact was not until 1816, when the brig, TRIAL, hijacked by convicts, was wrecked at Trial Bay. Subsequently explorer John Oxley visited the area in 1817.

Trial Bay was noted early as a valuable haven for passing ships during southerly gales because of its northerly aspect and position midway between Sydney and Brisbane. Shipping was the primary mode of trade and transport for the eastern seaboard communities. The economy of NSW was largely reliant on safe seaborne transport of people, goods and supplies.

Unfortunately many ships were wrecked and lives lost in the heavy seas in the period to 1866. Approximately 89 vessels and 243 lives were lost during this time. These statistics prompted the Parkes Government in 1866 to agree to build a breakwater at Trial Bay in order to make a safe harbour in all weather.

The prospect of a busy port at Trial Bay influenced the Government to commission a survey of the town. In 1866 the plans of the Town of Arakoon at Trial Bay were sent to the Surveyor General. The town centre was located at Lagger’s Point with suburban lands at “the south west rocks” named as the granite boulders just off the point were south west of the Point and a convenient marker for ships entering the bay in search of a safe anchorage.

The first land sales were held in March 1868. While it was always a popular place to camp, there were no permanent settlers at South West Rocks until 1886 at which time the population consisted of one family.

It was decided that the breakwater should be constructed by prison labour and its construction was influenced by two men. EO Moriarty, Engineer in Chief for Harbours and Rivers, who wished to see a breakwater constructed from Lagger’s Point to provide a safe harbour for sailing ships along the eastern seaboard and for those using the Macleay River, and Harold Maclean, Sheriff and Acting Inspector of Prisons wished to establish a Public Works Prison of reform.

The Gaol fulfilled both requirements, it was the first Public Works Prison in Australia with much more lenient conditions than other

¹Ray Kelly, NPWS collecting information from now deceased elders, 1975.
institutions and the prisoners were employed on the public work of constructing the breakwater.

The construction of Trial Bay Gaol, now listed on the Register of the National Estate, was begun in 1877 using locally quarried pink and grey granite. The first wing was complete in 1886 when the gaol was first occupied. The second wing was completed in 1890.

The town developed at Lagger's Point because of the prison and the South West Rocks area gained some prominence when the Macleay River Pilot Station was moved there in 1902 from Grassy Head because the river had changed course due to the flood of 1893. Even at this time however there were only twenty permanent residents in the area.

The site for the new Pilot Station was selected in 1899. By May 1902 it was ready for occupation. The five cottages, signal house and flagstaff, two boathouses and footbridge over South West Rocks Creek were occupied and run by the pilot, his four boatmen and their families. They were in charge of all shipping in transit between Smoky Cape and Grassy Head. Other duties included taking soundings of the Macleay River bar and channels up to Kempsey also piloting vessels across the River entrance, maintaining all buoys and beacons and assisting in shipping emergencies as well as the receipt and dispatch of mail.

The Gaol closed in 1903 after work on the breakwater prematurely ceased due to escalation of the coast and changed environmental conditions at the bay. It was reopened in 1915 to hold German internees and prisoners during World War 1. These internees had freedom during the day but were locked in the gaol at night. A minor population explosion occurred when Trial Bay prison was reopened to house the German internees, however when the facility finally closed in 1918, the township once again settled down to a sleepy coastal village for most of the year. Since that time the Gaol has been used for film and television and now houses a museum and is open to public most days.

As the coastal shipping industry declined, staffing of the Pilot Station was gradually reduced. In the 1930s one of the cottages became a Police Station and remains so today. Another cottage was removed and replaced during the 1960s. A Pilot remained at South West Rocks until the Trial Bay Oil Storage Facility closed in 1991 when the pilots house and another cottage were transferred to the Maritime Services Board for use as holiday homes for their employees.

A grant was subsequently obtained for the restoration of the Pilot's Cottage and in 1996 the two Cottages were transferred to the Department of Land and Water Conservation who leased them to Kempsey Shire Council for community use. The Pilot's Cottage is currently used as the South West Rocks Tourist Information Office and Maritime Museum and the other is used as an Art and Craft Gallery.

DEVELOPMENT OF THE LIGHTHOUSE

More than twenty ship wrecks have occurred in the area of the Smoky Cape headland, several of them with losses of life. Three men died when the keel WOOLOOMOOLOO was wrecked in Trial Bay in 1864 and nine died in the wreck of the brig ANNIE OGLE in 1875.

The need for a lighthouse at Smoky Cape was reported during the conference of the Principle Officers of the Maritime Departments of the Australian Colonies in 1873. However it was not until 1886 that the first action of establishing a light at Smoky Cape was taken. At this time Alexander Kethel, member for West Sydney, with the concurrence of the Marine Board passed a resolution in the Legislative Assembly stating that, for the benefit of the increasing coast trade and navigation it was necessary to erect a lighthouse at Smoky Cape. A sum of 18,000 pounds was set aside for the construction of the complex.

The Colonial Architect, James Barnett, who played an important role in the design and construction of lights at South Solitary Island, Montague Island and Green Cape, selected the site and prepared the necessary documentation. During the design stage major changes in organisation occurred. James Barnett was dismissed in 1890 and the office of the Colonial Architect was abolished. The project was then handed to CW Darley, Engineer-in-Chief for Harbours and Rivers.

Barnett's original design was however used for the Lighthouse. Tenders for the work were called in January 1889 and the offer from Messrs. Oakes and Company was successful. The contract called for the construction of the tower and annex, the Head Keeper’s residence.

Graham Brooks and Associates Pty Ltd

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and semi detached Assistant Keepers Cottages, a coach house and stables. All were to be erected on a 81 acre reserve, 128 metres above sea level.

By 1889 construction was well underway and a notice was given to mariner’s informing them of the construction of the lighthouse with full particulars coming at a later date. It was reported the contractor, Mr Oakes, died during the construction of the complex, however it was completed by his heirs within budget.

The light was first exhibited on the 15 April 1891. The official ceremony, attended by Darley and members of the Marine Board, taking place on the 29 April 1891.

Elevated on the cliff top, the Lighthouse stands 120 metres above high water, the tallest light on the NSW coast. The tower and houses were constructed of poured concrete with an aggregate of locally quarried granite, cement rendered both internally and externally. The lantern room floor of the lighthouse consists of voussoir blocks supported by cast in-situ corbels.

The use of concrete in Australian Lighthouses was relatively widespread. Initially used to provide a foundation of some mass to stabilise the tower, it soon replaced the traditional building materials of stone and timber. Barnet was the first to use concrete entirely (except for the bluestone gallery) in 1881 at Green Cape.

In situ concrete quarters are more rare, constructed in a line down the spine of the headland, with generous hipped roofs and numerous chimneys they exhibit the typical robustness of Barnet design. They are good examples of the typical Victorian Georgian style used by the NSW Colonial Architects Office for many late 19th century lighthouse residences.

In 1911-12 Commander Brewis in his survey of lighthouses on the NSW coastline proposed the establishment of the Commonwealth Lighthouse Service. Possibly as a result of this, the original burner was replaced by a Ford-Schmidt incandescent vapourised kerosene burner. This burner was designed by the staff of the NSW region of the Commonwealth Lighthouse Service. In his 1915 report Brewis noted that the Smoky Cape tower, apparatus and quarters were in good repair and serviceable.
In 1938 the lantern was overhauled and a temporary light was put into operation. It appears that this was the normal practice and that most of the lights went through similar processes. The dome was reconditioned, new gears and machinery were installed and the lantern was reglazed at this time.

During World War Two the Lighthouse Precinct was used for military activities including a searchlight battery and light gun emplacement. The exact nature of the military presence is unclear however remains of a military encampment remain to the west of the carpark and picnic area.

During the 1940s records indicate that a quarry was in operation in the area and that lorries travelling to and from the quarry had caused damage to the road leading to the Lighthouse Precinct. The road was periodically maintained and was sealed in 1957.

In 1952 it was reported that telephones were installed in the three quarters and the tower, all old bell wiring and attachments were apparently removed at this time. Some ten years later, in 1962, the light was converted to mains electric operation with two stand by diesel generators added to the complex. This resulted in an increase of candle power in the light and some alterations to the fabric of the tower including the alterations of two windows on the eastern elevation of the pavilion.

Connection to the electric power reduced the need for staff. The lighthouse staff was reduced from three to two Keepers at this time.

Other minor works were carried out in the time since. In the 1970s a radio mast was added to the pavilion and other works to the pavilion such as the replacement of the original cast iron guttering and downpipes.

In 1997 the Lighthouse Precinct was passed to the NPWS who have since undertaken some works to the complex including internal painting and decorating works to the Lighthouse Keeper's Quarters. The approach taken to the renovation works includes replacement of the service area fixtures and fittings. The works were preceded by photographic record and additional photographs were taken as the works were in progress.

AMSA retain use of the Light tower, entering into a leaseback arrangement which entails that they continue maintenance of the light tower.
2.2 Description of the Setting

THE COASTAL EDGE

Smoky Cape is located just south east of South West Rocks, a seaside resort town situated at the mouth of the Macleay River, 35 kilometres north east of Kempsey and midway between Coffs Harbour and Port Macquarie.

South West Rocks is a growing community and popular holiday destination and features a sweeping bay with variety of beaches facing different directions. East of the township is Loggers Point which encloses the bay and features a west facing beach at its base. The historic Trial Bay Gaol is located at the top of the Point. South of the Point, along the coast, there are a variety of forest fringed beaches interspersed by small headlands and including small protected beaches, such as Horsehoe Bay and Little Bay, isolated Gap Beach and North Smoky.

The Lighthouse is located on a dramatic headland with two prominent mountains, Big Smoky and Little Smoky, which are major topographical landmarks in the region forming the backdrop to the headland. The Smoky Cape Range extends north of Smoky Cape to Loggers Point. It is largely made up of granite, with spectacular geological folding evident at Gap Beach, just north of the Lighthouse.

A wide variety of flora and fauna species are found along the range. Blackbutt woodland occupies the higher slopes with unique cabbage tree palm forest in the gullies. The exposed headlands feature coastal heath plants while the sands of the beach is joined dunal vegetation and stands of littoral rainforest in the lower and protected areas.

The lighthouse is visible at a distance only from the south west, along the arterial road that follows the Macleay River towards South West Rocks. The site is not visible from the holiday community of South West Rocks, being shielded by the two mountains. The most visible cultural attraction and major tourism destination is Trial Bay Gaol which dates from about the same time as the Lighthouse. The Gaol complex is located in the Arakoon State Recreation Area and has recently been amalgamated into the National Park. The Lighthouse and Gaol are generally regarded as two distinct management areas however they are connected by one of the major walking tracks in the area.

Hat Head National Park extends south of the Cape, it features a spectacular coastline with a number of beaches. Reserved in 1972 it is regarded as one of the "great coastal parks" of NSW spanning parallel to the coast to Hat Head and Kororogo Point at the southern end of Smoky Beach.

South of the Lighthouse, along the 17 kilometres of Smoky Beach, evidence of past land use display the fragile nature of the coastal ecology. Grazing and burning, conducted prior to the Park’s dedication, have destroyed the dunal vegetation. Many dunes are wholly mobile, invading the areas including wetland to the west at a rate of between one and two metres or more a year.

Between Smoky Cape and Kororogo Point wetlands parallel the dunes and feature sedges and reed species together with stands of melaleucas. The animals found in these areas are as diverse as their habitats.

Just off the coast, directly opposite the lighthouse is a small island, Fish Rock, which is regarded as one of the best diving locations in the world, partly due to the underwater cave within the Island. The Cape actually forms the backdrop to three significant islands, Green Island, Fish Rock and Black Rock. These provide ample fishing and diving as well as being the most southerly extremity of coral reef on the coast of NSW.

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THE HEADLAND

The Smoky Cape headland is within Hat Head National Park and overlooks stretches of beach to the north and south, wetlands and is also a popular whale watching vantage point.

A sealed road leads to the Lighthouse precinct. Sealed in 1987, this leaves the main road and traverses approximately 4 kilometres of relatively flat bushland before rising quickly to the climax of the carpark and lighthouse precinct, approximately 12 kilometres south east of the centre of the township of South West Rocks.

The Lighthouse Precinct sits on top of the ridge leading to the eastern terminus of the headland. It is surrounded by dense natural vegetation.

The Lighthouse Precinct, due to its prominence provides panoramic views to the surrounding area which display a comprehensive variety of coastal forms from island, beach and heathland to dune and wetland systems. The headland features steep slopes and native vegetation with weeds present primarily near the Lighthouse precinct.

The headland and precinct being the starting point of a number of coastal rainforest, beach and headland walks also accessing the dam site and former military camp to the west and Captain Cooks Lookout, a picnic area, also located on the headland, north west of the Lighthouse Precinct.
THE Lighthouse PRECINCT

Smoky Cape Lighthouse stands on a dramatic coastal headland 120 metres above high-water, it is the most elevated light on the NSW coast, despite the relatively squat tower, and with the exception of the Queensland light on Fitzroy Island, it has the longest range of all of the lighthouses on the eastern coast. Perhaps the most notable feature of the precinct is that the Lighthouse complex is the only man made element visible in its locale.

The Lighthouse is sited on the top of a bluff, which falls steeply away to the sea below. The support buildings, including the small freestanding office and cottages are set below and behind the lighthouse, receiving more protection from adverse weather conditions. The Head Keeper's Cottage and two Assistants Cottages are sited on level platforms, cut from the steeply sloping topography and stabilised by high concrete retaining walls. The stables are set well below the cottages, near the entry to the precinct, carpark and access road.

The site rises quite steeply from the carpark towards the Lighthouse. The narrow pathway that runs beside the cottages, rising towards the lighthouse is known as "Heart Attack Hill". Cottage yards are securely fenced and there is a grade separation to the pedestrian pathway which rises to access the lighthouse.

Vegetation in the Lighthouse precinct is essentially cleared coastal heath leaving maintained exotic grasses.

The two cottages are enclosed with small gardens and both feature views back to the mountain and north and south over the nearby beaches. Access to the southern cottage, from the driveway, passes through the garden of the other cottage. Due to the exposed nature of the site the cultural planting in the gardens around the cottages is predominantly lawn.

The precinct is serviced by three underground water tanks, located adjacent to the cottages. They are supplemented by a spring fed dam water supply from the adjacent mountain.

There is limited on site carparking with no provision for parking in the private yards of the cottages. There is however a four car garage which is located at the base of the precinct, beyond the public carpark located below the Precinct to the west. It is shared between all of the occupants of the cottages.
2.3
The Constructed Image

The Lighthouse Precinct consists of

- Lighthouse and attached engine room
- Flag Locker
- Head Keepers Cottage
- Two attached Assistant Keepers cottages
- Former Stables buildings
- Garage
- Small freestanding office/weather station
- Small flag room and several former fuel stores.

A number of associated sites in the vicinity of the Precinct includes:

- World War Two Military Camp
- The dam site
- WW2 emplacement
- Captain Cook Lookout and Picnic area.

THE LIGHTHOUSE TOWER

The site is now owned by NPWS but the lighthouse tower and small office/weather station are leased back to AMSA.

The Lighthouse is octagonal with large single storey ground floor pavilion featuring enclosed passage and rooms originally used as storage and work room areas at its base. Constructed in mass concrete, using locally mined granite as the aggregate, the tower stands 17 metres tall.

The tower is entered from an enclosed passage which also access the two storey rooms and are also constructed of mass concrete. It is divided into two storeys with cast iron floors and staircases leading up to the gallery level which is 9.8 metres above ground level. A screen wall also of mass concrete is built around the tower.

The inside diameter of the tower is 3.7 metres although the external form of the lighthouse is octagonal. The walls are 920mm at the base and taper to 620mm at the top and are cemented internally and externally. The gallery or the floor of the lantern is formed of granite voussoir blocks supported on moulded granite brackets. An ornate gunmetal railing featuring Queen Victoria's mark is used for the handrailings at this level.

The tower walls feature a number of openings including a small opening located below the balcony which housed a subsidiary red light to cover Fish Rock.

The optical apparatus consists of a first order lantern and 920mm lens manufactured by Chance Bros. of Birmingham, England. The lens rotated on rollers and was originally operated by weight driven clockwork mechanism controlled by the lighthouse keepers.

In 1912 the original burner was replaced by an incandescent vapourised kerosene burner and in 1962 the light was altered to a mains electric operation, resulting in an increase in power and minor alteration to two of the openings on the eastern facade. In 1990 the roof cladding of the pavilion was replaced with zincalume.

The Lighthouse is leased and maintained by AMSA and has recently been painted. The original optic remains but the light source has been updated. The light still operates at night and is screened from view towards the settled areas to the south west.

HEAD LIGHT KEEPER'S COTTAGE

The Head Keeper's Cottage is also constructed in concrete and was originally designed in 1888. It is a good example of the typical Victorian Georgian style used by the NSW Colonial Architects Office for many of the late 19th century residences.

The building originally featured two bedrooms, sitting room, Inspecting Officer's Room, dining room, kitchens and stores, mostly surrounded by verandahs connected by and about a central T shaped corridor. The verandahs feature the characteristic windbreaks at the north and south eastern corners which have since been enclosed to provide additional space. The building incorporates a rear service wing and separate store and bunding walls which form a courtyard and accommodates one of the underground water tanks.

The building also features verandahs on the northern and southern facades which are connected by the central passage. Another verandah is located on the eastern facade of the building and faces a concrete retaining wall.

The cottage was painted externally in 1998 and retains an older paint scheme internally. Most of the early joinery externally and internally remains intact. There has been some repair and replacement work, with the carpentry
simply replicating the previous work. Internally the ceilings have been replaced with either timber boards or batten ceilings possibly during the 1920s and 1940s, although some original lath and plaster ceilings remain.

The southern verandah was altered during the 1960s by the construction of a lavatory and enclosed entrance way. The original windbreaks were infilled during the 1950s and 1980s with some of the spaces converted into a storage shed, office and bathroom. The courtyard verandah was infilled 1970s.

The kitchen was refitted during the 1970s, this work included the installation of a new kitchen roof vent.

The roofing was replaced with white custom orb, guttering, and downpipes also replaced c.1990.

ASSISTANT KEEPER’S COTTAGES

The Assistants quarters are two semi-detached cottages separated by central party wall and originally each containing four rooms, rear service wing and verandahs connected by T shaped corridor. Also constructed of mass concrete, cement rendered externally and plastered internally, the building features hipped roof with painted brick chimneys and skillion roofed verandahs supported on simply decorated timber posts. New roof cladding, guttering and downpipes were installed c.1990.

The northern residence features the characteristic corner wind break at the north western corner flanked by two open verandahs on the northern and western facades. A verandah located on the eastern facade of the building was enclosed during the 1970s, however the kitchen and store areas continue to enclose the courtyard space to the east of the building.

All of the ceilings were battened during the 1920s through to the 1940s over either the original lath and plaster or later fibrous plaster. The ceilings to the lobby and kitchen appear to be fibre board with timber battens.

The northern residence was at one point enlarged, featuring an additional bedroom, facilitated by a door opening made in the dividing partywall between the two residences and partitioning. This formed the smaller, southern residence featuring two bedrooms in addition to kitchen, bathroom and external WCs, with enclosed verandahs providing additional space.

Between the 1920s and 1940s the ceilings of most of the spaces in the southern residence were strapped with timber battens over the original lath and plaster. However the laundry space and the entry corridor retain their original lath and plaster ceilings.

The cottages were painted externally and internally in 1998 and generally have been renovated internally and refurbished for holiday lettings. There are current plans to upgrade the bathrooms to provide internal an toilet in the southern cottage and to renovate the kitchens to improve their presentation. The existing external toilets will remain. The two residence were linked by an internal doorway through the party wall at the time when the Lighthouse Service required a change in the accommodation provisions. This opening was blocked by AMSA in 1998, reinstating the original floor plan layout, but can still be read in the fabric.

FREESTANDING OFFICE

The small freestanding office building will continue as a weather station and is part of the leaseback arrangement with AMSA. It features an asbestos roof which is in reasonable condition.

OTHER STRUCTURES & ELEMENTS

The footings of the flagstaff remain in front of the lighthouse, but the flagstaff has been removed. It was an integral part of the operation of the Lighthouse and can be partly seen in the AMSA brochure on the Lighthouse.

As designed the stables building was also constructed of concrete and originally consisted of cart shed, two stalls and forage room. The building has undergone substantial alterations including removal of the original windows and ledges and sheeted doors. Roller shutters have also been installed, internal linings re-rendered and a new concrete floor slab poured. The stables building is in the poorest condition and features a simple hipped roof clad in corrugated asbestos sheets, at some stage the original fascia, boxed eaves and guttering have been removed. Repair work is needed to replace the asbestos roofing and replace the missing guttering.

The workshop building is a fibre cement clad building probably constructed during the 1940s as a fuel store. It has since been altered during
the 1970s and 1980s and features a hipped roof clad in corrugated asbestos and timber framed windows and doors.

The garage accommodates four vehicles and is a long rectangular shaped building constructed in concrete block construction. Constructed during the 1980s it also features four roller shutter doors and simple flat profiled steel sheet clad roof. Its location is discretely separated from the main complex.

Three cement rendered underground water tanks remain, in the cottage yards, the capacity in proportion with each residence. The accompanying pumps however have been removed.

Paving, fencing, retaining walls and remnant gardens surround the complex.

Parking facilities and vehicular access has been added to the complex and include a sealed road. A proposal for upgrading the picnic area was undertaken in 1998. The carpark will cater for about 35 cars and several buses once it is completed. The works will include an upgraded entry gate, upgraded WC block and presentation signage.

Walking tracks down to the nearby beach and further on the South West Rocks all start from the Captain Cook Lookout Picnic Area. Formerly established by the NPWS in 1980 the tracks require further works and maintenance.

Captain Cook Lookout is located in the Lighthouse reserve, at the foot of the headland. Transferred to the local Council the memorial was dedicated to Captain Cook in 1970 to mark the bicentennial of the sighting of the Cape by Captain Cook.

Remains of military use of the headland remains within the Reserve. Probably an observation post it features remnants of equipment emplacements and telephone communications.

A dam, constructed at the time of the construction of the lighthouse complex is located on Big Smoky Hill. It appears fresh water continues to supply the dam via gravitation feed.
2.4 Significance

"Smoky Cape Lighthouse remains as one of the strongest lighthouse designs on the New South Wales coast. Its commanding position above the sea and the surrounding dramatic landscape helps make it a favourite place among tourists. It seems to fit the bill in most people's mind as to what a lighthouse should look like, and conjures up the romantic notions so often associated with such maritime buildings."^{5}

Smoky Cape is an outstanding and relatively intact example of a late Victorian Lightstation unique in NSW for the construction of all of its main buildings in insitu concrete and located in an unspoilt and spectacular setting. It contains a fine lighthouse of unusual hexagonal geometry with a rare first order Chance Bros. rotating optic. Smoky Cape is part of a cohesive group of late 19th and early 20th century lightstations in NSW each of which demonstrates the incremental changes in the design and construction of the various complexes.

It is an important and representative example of the so called "coastal highway lighthouses" that were erected along the NSW coastline between 1862 and 1903.

HISTORIC SIGNIFICANCE

Smoky Cape is one of the many points on the eastern coastline of Australia named by Captain Cook in 1770 and was named for the smoky fires observed on the headland.

The Smoky Range is significant to the Aboriginal populations with a number of mythological associations.

The Lighthouse Precinct with the Trial Bay Gaol to its north, provide spectacular examples of early Colonial architecture. World War 2 radar installations and ruins are an interesting example of more recent use and contribute to its historical importance and association.

Smoky Cape is an outstanding and relatively intact example of a late Victorian Lightstation unique in NSW for the use of in-situ mass concrete in the construction of its main buildings located in predominantly natural setting. The lighthouse is a fine example constructed in an unusual hexagonal shape with a rare first order Chance Bros. rotating optic.

It is one of a cohesive group of 19th and early 20th century Lighthouses in NSW which demonstrate the incremental change in lighthouse design during that time frame.

AESTHETIC SIGNIFICANCE

The contrast between the man-made complex and the exposed natural and remote location gives it considerable aesthetic significance and power. The landform of the place is essentially in its natural form apart from the road and building cuttings.

The visual context of the lighthouse group is significant. From much of the headland, especially the seaward side and from the beaches, there is no other evidence of human made object visible, other than the lighthouse and perhaps the cottages. This sense of isolation is one of the most attractive features of the immediate locale.

James Barnett designed a series of lighthouse towers in NSW reported as being the most architecturally sophisticated in Australia. Smoky Cape retains the distinctive bracketed capital and gunmetal balcony balustrade characteristic to Barnett's design. It is similar in style to Sugarloaf and Barrenjoey, in this respect. The pavilion entrance is also a feature reintroduced by Barnett and remains at Smoky Cape. The internal cast iron stair is also a good example of its type.

The Smoky Cape Keepers' Cottages display the typical robustness of the Barnett design being the Victorian Georgian style used extensively by the NSW Colonial Architect's office throughout the late 19th century. The buildings retain devices for tempering with the effects of the exposed locations such as the corner windbreaks and screens to the verandahs and boundary walls. The residences are logically laid out with views to the tower and illustrate the hierarchy of the keepers.

The other buildings such as the flag locker and former stables are rare surviving buildings of their type constructed within the lighthouse complex.

Other site features such as the retaining walls, water tanks and flagstaff remains are also significant for their association and role they played within the complex.

SOCIAL SIGNIFICANCE

The continued occupation of the Lighthouse at a relatively remote location for over 100 years combined with the effort to establish the place makes a significant contribution to the maritime history of the area. The place has continued to attract a number of visitors who rarely fail to admire the character, setting and history of the place. The location is regularly visited and is highly regarded as one of the oldest and substantially intact building complexes in the area.

SCIENTIFIC SIGNIFICANCE

The tower and houses are constructed of poured concrete using aggregate of locally quarried granite and cement rendered both internally and externally. The use of concrete in Australian lighthouses was relatively widespread. In NSW however Green Cape and Smoky Cape lighthouses are the only known in situ concrete towers. Throughout Australia Smoky Cape is one of approximately 10 in-situ concrete towers constructed prior to 1920.

The lighthouse lantern and optic are significant features. The optic, cast iron and copper lantern house are examples of the late 19th century industrial technology. The optic however is relatively rare due to its detailed configuration consisting of triple panels which provide the triple group flash. Whilst there are numerous surviving 12” diameter Chance lanterns around Australia, this is one of four known to have both trapezoidal glazing pattern and Trinity type vent.

The immediate Lighthouse precinct contains sites related to WW2 defence installations and there is the site of a large associated encampment to the west of the carpark.

SIGNIFICANCE TO ABORIGINAL PEOPLE

The significance of this place for the local Aboriginal community extends well beyond the lighthouse precinct and includes Smoky Cape Mountain and special areas on the northern side of the headland, relating to mythology.

Past and historical associations and uses are located throughout the area, especially the Christmas camps to the south of the Lighthouse.

The area is seen as a suitable place for return and reburial of disturbed or museum held skeletal remains.

ELEMENTS OF PRIMARY AND CONTRIBUTORY SIGNIFICANCE

Grading the comparative significance of various elements or characteristics of an historic place or building is a useful management approach to support future programmes of detailed fabric or artefact conservation.

The majority of the conservation management plans prepared for AMSA included a graded table of significance for the various components of the lighthouse complexes, including landscape and archaeological features and of individual buildings.

The subsequent allocation of graded levels of significance in some of the CMPs is considered by this consultant to be overly complex and not beneficial in terms of providing a clear background to the conservation and management of building fabric or other elements.

The conclusions reached by the consultant team preparing this overall Conservation Management Plan have taken a different emphasis.

The characteristic considered to be the most important in relation to the NPWS Lighthouses is the manner in which they have evolved progressively while retaining their essential integrity and significant features. Accordingly a three tier significance rating has been adopted.

- Characteristics of Primary Significance
- Characteristics of Contributory Significance
- Characteristics of Little or No Significance.

Primary Significance:

All those elements and features that relate to the initial construction and operation of the particular Lighthouse and its supporting buildings and infrastructure. It includes the pre-existing topographical and landscape characteristics, initial cultural landscape features and sites of Aboriginal cultural significance.
Contributory Significance:

All those elements which relate to the subsequent use and development of the place as an operational Lighthouse, right down to the period when they were transferred to NPWS or other relevant agencies such as Australian Property Group (South Solitary Island) or the Cape Byron Headland Trust. It includes subsequent natural and cultural landscape features and post contact period sites and places of Aboriginal cultural significance.

Elements Of Little Or No Significance:

Generally only those items which relate to the subsequent re-use and development of the place after it was transferred to NPWS.
3.0 Constraints & Opportunities

This section confirms the listing status by various heritage agencies for the Smoky Cape Lighthouse and summarises the views of relevant community members or representatives.

Refer to the main Plan for guidance with regard to the appropriate responsibilities and actions to be taken in relation to these listings and viewpoints.

3.1 Heritage Recognition & Listing Status

NATIONAL AGENCIES

The primary conservation and management framework for the Lighthouse is the NSW National Parks and Wildlife Act. The site of the Lighthouse complex is not currently gazetted within the Hat Head National Park, but should be added to it. The Park is managed under the Hat Head National Park, Plan of Management. This will need to be amended in accordance with the recommendations of this Plan.

The Smoky Cape lighthouse is listed on the Register of the National Estate (RNE) administered by the Australian Heritage Commission.

AMSA retains operational use of the tower and the small weather office, under the terms of the Heads of Agreement.

STATE AGENCIES

Smoky Cape lighthouse group (comprising lighthouse, generator building, two residences and store) is listed as an item of Regional Environmental significance in the North Coast Regional Environmental Plan 1988 (amended 1994) issued by the Department of Urban Affairs and Planning.

Smoky Cape Lighthouse is contained within the NPWS s170 Heritage and Conservation Register, under the NSW Heritage Act and Heritage Amendment Bill 1998.

Smoky Cape Lighthouse has been promoted by NPWS for listing in the State Heritage Register.

LOCAL GOVERNMENT

The Smoky Cape Lighthouse is listed as an item of Environmental Heritage in the Kempsey Shire Council Local Environmental Plan 1987.

NATIONAL TRUST OF AUSTRALIA (NSW)

Smoky Cape Lighthouse is classified by the National Trust of Australia (NSW).

ABORIGINAL COMMUNITY

The area is associated with the Dunghutti Tribe. The Dunghutti Elders Corporation represents the native title claimant group however no claims have been made for the vicinity of the Lighthouse.

The significance of the place for the local Aboriginal community extends beyond the Lighthouse Precinct and includes Smoky Cape Mountain and special areas on the northern side of the headland relating to mythology. Past and historical associations and uses are located throughout the area, particularly the Christmas Camps to the south of the Lighthouse. The area is seen as a suitable place for the return and re-burial of disturbed or museum held skeletal remains.

NPWS consultation with the Aboriginal community is presently informal and largely relates to archaeological management. Ray Kelly, former senior Aboriginal sites officer, now retired, has consulted with the community over a long period of time regarding sacred sites and sites of historical importance.

Further consultation is required to determine the nature and acceptance or otherwise of the current consultation practices. Major issues concern protection of sites, land rights and areas of special significance, re-burial and restoration of sites.

There is no formal or known Aboriginal community use at present and no Aboriginal and local tourism at the Lighthouse Precinct.

LOCAL COMMUNITY

South West Rocks is a growing community and popular holiday destination. NPWS have
to date implemented a strong local consultation process and has brought together key stakeholders including Kempsey Shire Council, Macleay River Historical Society, the local Maritime Museum, Chamber of Commerce, Managing Real Estate Agent and retired Lighthouse Keepers.

The decision to open Smoky Cape for holiday letting was well discussed locally and received good support. General community consultation should continue as part of the ongoing use and management of the place. There generally is strong support for the Lighthouse as a major factor in boosting local tourism.

Key local stakeholders include the Historical Society, Chamber of Commerce and Local Council tourism office. There is a South West Rocks Maritime Heritage Committee and History Society are very keen that the promotion work expended on the lighthouse does not dilute their own efforts. They have a small museum at the South West Rocks Pilot Station.

Smoky Cape has an added advantage that a number of former Lighthouse Keeper’s have retired to the area. This small community provide added value to the community consultation processes and also give opportunity for further insight and interpretation of the Lighthouse complexes.

Discussion with one of the retired Keepers raised a number of interesting points.

The lighthouses were self funding and profitable, a strong revenue source for government, with their income based on shipping levies. As a result the Lighthouse service was passed around to various Commonwealth Departments over the years.

Apparently the keepers had devised a potential scheme for showing visitors up the towers that would have turned a good profit. He mentioned that there had been an agreement between AMSA’s predecessor and the Lighthouse Keepers’ union that the public could only access the lighthouse towers when accompanied by a keeper. The status of these plans and agreements is thought to have lapsed once the sites were automated.

There is a need in such a small community for the efforts of the lighthouse promotion and tourism to co-ordinate with and reinforce the local efforts, most of which are on a voluntary basis. This should certainly include using their museum as an information outlet in the village.

TOURISM OPERATORS

The Lighthouse has traditionally been a tourist attraction as evidenced in the Visitor's books. The combination of the natural elements including whale watching from the Lighthouse Precinct and the cultural elements has long provided tourism opportunities.

Most of the tourism into the region is self drive although bus tours on the coast route regularly stop at the Trial Bay Gaol complex. The Gaol complex is a major tourism attraction and dates from about the same time as the lighthouse. There is good potential for joint promotion. There are also walking tracks that run between the two features also passing through significant areas of vegetation and beach.

Some tourism in the area is currently geared towards whale watching which is particularly popular at the Cape.
3.2 Conserving the Cultural Resources

THE CONDITION OF THE BUILDINGS AND STRUCTURES

The buildings within the immediate precinct include the AMSA managed lighthouse and attached engine room, small flag locker, a small free standing office for weather station, Main Cottage as contract staff accommodation, two cottages for holiday accommodation, former stables building and garages. All buildings are generally in good condition.

The Lighthouse tower and cottages are generally in good condition. AMSA retain use of the lighthouse and also maintain the structure.

The three cottages were painted externally in 1998. The two Assistant's cottages have also been painted internally and renovated by the NPWS and let for holiday accommodation. The old asbestos roofing to all three cottages has been recently replaced with white custom orb. Termite attack remains a problem, particularly with the Assistant Keepers' cottage.

CULTURAL & NATURAL LANDSCAPES

The coastal zone at Smoky Cape is largely a natural, undeveloped landscape which highlights and the various cultural features such as the Lighthouse Precinct and Trial Bay Gaol.

The coastal edge zone is enclosed by Big Smoky and Little Smoky which are major topographical landmarks in the region and part of the Smoky Range which form the backdrop to the headlands, coast and Hat Head National Park. The zone generally features a spectacular coastline with a number of forest fringed beaches, wide variety of flora and fauna species, woodland and forests. The exposed headlands feature coastal heath plants while the sands of the beach join dunal vegetation and stands of littoral rainforest behind the dunes.

The headland and coastal zones also form the backdrop to Green Island, Fish Rock and Black Rock which have been recognised as fishing and diving areas as well as being part of a significant coral reef seascape.

The headland zone is also visually dominated by the natural vegetation cover which emphasises the location and isolation of the Lighthouse Precinct. The natural features however are balanced by the additional cultural features such as Captain Cook's lookout, the various military remains, Aboriginal sites and fisherman and general walking track system.

The Lighthouse Precinct or zone is a modified natural landscape of cultural significance. The layout and form of the complex is significant displaying a hierarchical type organisation. Most of the enclosed garden areas consist of lawns. The most significant threat at this stage is weed infestation.

The modification and earlier introduction of domesticated animals and introduced plant species altered the natural balance. The area had been heavily overgrown after a period of neglect by AMSA and NPWS are concerned that weeds do not escape from the Precinct into the adjoining Park area. There is some weed infestation on the sloping ground immediately below and the north of the Lighthouse Precinct.

There are possibly additional aspects of the cultural landscape of the lighthouse, including vegetable gardens by the garages, banana plantations passionfruit plantings. There is a good potential to interpret these aspects, in addition to the buildings.

ABORIGINAL CULTURAL RESOURCES

Two middens and a burial site at Saltwater Inlet have been listed and recorded, however no systematic surveys over the area have been conducted and there are local reports of sites which have never been recorded or registered.

Potential sites identified include more midden, Camp Sites, burials, possible Bora Ring, scarred trees, contact sites and Christmas Camps. Further Aboriginal consultation and involvement is required in addition to more comprehensive survey and oral history work.

There is a long association of the Dunghutti people in the area. The first Native Title Claim to be determined in NSW was made by the Dunghutti people over an area of land at Crescent Head. The relationship of the Dunghutti people to this area has been researched by Barry Morris both for the Native Claim and in the preparation of his PhD.
There is substantial information on the history of this group available.

HISTORICAL ARCHAEOLOGICAL RESOURCES

The Lighthouse Precinct has the potential to yield information related to the initial construction of the complex and prior and subsequent use and development of the area through the surviving archaeological material. It should be regarded as an area of high archaeological sensitivity.

In addition to the layout and various elements of the Lighthouse Precinct, which indicates the use and development of complex over 100 years of occupation, elements such as the fisherman’s tracks, various defence installations and remains provide a wider and more diverse interest and interpretation of the use of the area and should be investigated further.

NAVIGATIONAL AIDS

AMSA retains operational use of the Smoky Cape Tower and freestanding building which is used as a weather station, under the terms of the Heads of Agreement. AMSA will therefore need to cooperate with NPWS in the overall management of the Light and complex in general.

3.3 Other Management Issues

PRECINCT & SITE MANAGEMENT

The visual context of the lighthouse group is very important. From much of the headland, especially the seaward side and from the beaches, there is no other man made object visible, other than the lighthouse, and perhaps the cottages. This sense of isolation is one of the most attractive features of the immediate locale and needs to be protected.

The lighthouse is sited on the top of a bluff, which falls steeply away to the sea below. The support buildings, including the small free standing office and cottages are set below and behind the lighthouse. The main cottage and then the two support cottages are sited on level platforms, cut from the steeply sloping topography and stabilised by high concrete retaining walls. The stables are set well below the cottages, near the entry to the precinct from the carpark and access road.

The sealed access road leading to the Lighthouse Precinct and various walking tracks leading from the site need to be maintained.

On site parking, within the immediate precinct of the cottages, is almost non existent. Cars can drive up a narrow driveway, but must traverse all the way up the lighthouse forecourt before turning around and descending to the small grassed plot in front of the Head Lighthouse Keepers Cottage. In this location it is immediately adjacent to the main pedestrian pathway up the lighthouse and excessive parking (more than two cars) would be a disruptive visual element.

There is no provision for parking within the private yards of the cottages. There is a four car garage located at the base of the precinct, accessed beyond the public carpark. While the garages are relatively recent, they provide relatively secure and weather proof protection for holiday tenants cars, a factor which is considered an important requirement. There is however concern that holiday tenants will not easily be able to carry suitcases up from the garage level to the cottages.

The two cottages are enclosed with small but adequate gardens, both with superb views back to the mountain and north or south over the nearby beaches. Access to the southern cottage, from the driveway, passes through the garden of the other cottage.

The site rises quite steeply from the carpark towards the Lighthouse. The narrow pathway is know as “Heart Attack Hill”. NPWS Staff have considered that there is a need for disabled access assistance for the steep pathway.

The precinct is serviced by three underground water tanks, located adjacent to the cottages. They are supplemented by a spring fed dam water supply from the adjacent mountain.

Vandalism can be an issue for cars parked in the carpark. There does not seem to be a great problem with vandalism of the buildings, but NPWS has maintained a caretaker presence for security, under the terms of the Heads of Agreement.

Weed infestation in the adjacent Park is a problem. The worst is Madeira Vine. NPWS are concerned that it does not escape into the Park from the lighthouse precinct. The area
had been heavily overgrown after a period of neglect by AMSA. There is still considerable weed infestation on the sloping ground immediately below and to the north of the lighthouse precinct.

There is a group of Aboriginal people with a direct interest in the area. This issue needs to be handled with some care, due to different interest groups within the local area. The recent death of the local leader makes it harder to gain information.

The District is setting up a Special Purpose Account to manage the income derived from the lighthouse precinct.

The District Budget for the Lighthouse in 1997-98 has been approximately $332,000. This was applied to upgrading the carpark and picnic area, painting, general refurbishment of the cottages for holiday letting, minor carpentry works and weed removal.

$120,000 has been identified for conservation works in 1998-99. This will be used for more weed removal, bathroom and kitchen upgrading in the main cottage.

BUILDING CONSERVATION AND RE-USE ISSUES

The lighthouse is maintained by AMSA and was repainted in 1998. The original optic remains but the light source has been updated. The light still operates at night, and is screened from view towards the settled areas to the south west. The small free standing office has an asbestos roof, which is in reasonable condition.

The lighthouse tower is only available for public access under the terms of the Heads of Agreement.

A BCA analysis of the lighthouse has shown that there are serious issues to be resolved if public access was to be allowed. These include a fire rated door, additional balustrade screen and removal of low clearances. Resolution of the BCA issues must be undertaken in relation to the likely impact of upgrading works on the significance of the place. Disabled access to the upper portion of the tower could pose great problems without major change to the tower.

The small office building will continue as a weather station.

The three cottages have been recently painted externally. The two smaller cottages have also been painted internally, while the Head Keeper's Cottage remains with an older paint scheme internally. External fencing has also been recently painted white. While Dulux claim that the external paint should last 10 years, NPWS staff consider that it will need repainting within 5 to 8 years due to the harsh weather conditions.

The two Assistant Keepers houses have been renovated internally and refurbished for holiday lettings. Upgrading bathrooms to provide internal toilets and kitchens was undertaken in 1998. The existing external toilets will remain but have a step at their door which is not considered satisfactory for liability reasons.

The use of the two Assistant Keepers Cottages for holiday letting is appropriate and is already exhibiting a good level of demand. The proposal to renovate the Bathrooms was supported by a small report summarising the significance and impact. The approach taken to the renovation works has been relatively low key.

The two smaller cottages were linked by an internal doorway through the party wall, as a result of an earlier instruction about minimum numbers of rooms. This doorway has been blocked up, but can still be read in the fabric.

The stables building is in the poorest condition. Repair work is needed to replace the asbestos roofing and replace the missing guttering at such time as it becomes necessary. There is a need to replace the asbestos roof on the stables, due to their poor condition. The former stables building is being actively considered for an interpretation centre and retail outlet.

New doors have been fitted to the free standing garages. The retention of the modern four car garage as holiday tenant parking means that this space is not available for alternative uses such as caretaker accommodation, retail or interpretation space.

There is concern that the current septic tank sewerage system might fail from the additional use. If so it will be replaced by a bio-cycle system.

There is considered to be little potential for a tea room or restaurant operation in the
forecastable future, given that the level of visitation is relatively low and the site “quite remote” from the main tourism centre.

TOURISM MANAGEMENT ISSUES

The lighthouse was a tourism attraction from the early days of its operation. The visitor’s book has been located which covers the full period since the opening of the Lighthouse. Part of the attraction was the construction of the road to the lighthouse as part of the initial building programme. This provided public access to a headland that had previously been inaccessible except on foot.

Most of the tourism into the region is self drive, although bus tours on the coast route regularly stop at the Gaol. Currently there is estimated to be about 8,000 cars per annum coming to the lighthouse carpark.

Most of the tourism in the area focuses on the passive enjoyment of the coastal resources. The lighthouse headland is a popular whale watching vantage point. The Lighthouse Precinct should be interpreted and promoted as a good example of a late Victoria period NSW Lightstation of unique concrete construction with great aesthetic appeal due its architecture and setting.

There are a number of opportunities to link the Lighthouse visitor experience with existing local tourism elements including links to nearby beaches and the Trial Bay Gaol complex.

The National Park joins the Arakoon State Recreation Area, which contains the Trial Bay Gaol. It is estimated that the Gaol has about 800,000 visitors per year. There should be some additional cross promotional retailing opportunities at the Trial Bay Gaol shop.

The small island directly off the coast opposite the lighthouse is apparently considered one of the top ten dive spots in the world. There may be opportunity to link up with boat trips from the adjacent beach should divers wish to stay at the lighthouse.

Other attractions at the lighthouse include photography, bird watching, whale watching, the topography and landscape, walking trails into the nearby rainforest segments and coastal forest, fishing, the beaches and coastal National Park. There is a major interpretive story there about dune wetland interface management for guests looking down from the cottages. Interpretation of the number of shipwrecks in the region and military use of the area provides additional interest.

Mr John Hampson, one of the former Lighthouse Keeper and Union Official commented that the union had developed a plan to take limited guided tours into the lighthouses. This was some years ago, when before the automation programme was finalised. They were confident that there was a great tourism potential and a good earning potential, particularly as the ultimate bonus of a lighthouse site visit was to climb the tower.

The Cottages are an excellent resource for holiday lettings. The views and atmosphere of the place are fantastic. Once the gate is shut at night the public seem to respect the privacy of the precinct, despite the lack of effective security. There is some conflict however between privacy for the holiday tenants and anyone who wants to go to the lighthouse to watch the sunrise.

The District has commenced a leasing programme for the two Assistant Lighthouse Keepers Cottages, managed by a local Real Estate Agent. Although only in its first few months, bookings have been strong.

Following the publicity surrounding the Minister’s announcement, Smoky received a high level of enquiry, which resulted in a solid block of new “holiday cottage” bookings.

Prices were set after assessing the rates being achieved at Cape Byron. With a 65% occupancy and allowing for management, bookings, minor maintenance and housekeeping, the estimated net annual income is around $35,000.

The local South West Rocks Real Estate Agent has a web site and advertises the Cottages on that site. They have also produced a small attractive brochure. The accommodation is let on a fully self catering basis, with the visitors bringing their own linen and food. The letting agent arranges for cleaning after each letting period is over.

RECENT ACTIVITIES

- In mid 1998 the Arakoon State Recreation Area, including the Trial Bay Gaol complex, was formally incorporated into Hat Head National Park.
- Draft Plan of Management for Hat Head
National Park reviewed by NPWS 5 May 1998, only makes reference to the Lighthouse and indicates that detailed management would be undertaken through a Conservation Management Plan.

- Vegetation study completed for the whole of Hat Head.
- Lighthouse recently painted externally
  - Assistant Keepers Cottages painted externally and internally refurbished for holiday letting.
  - Walking tracks take off from this area to cover the whole headland.
  - Discussions with AMSA in progress to explore potential for access to tower, under the conditions of the Heads of Agreement.

- Various items not in the CMP need to be addressed, particularly site management issues.
- The District is getting a lot of commercial enquiries from local people about running tours.
- The District office is looking at undertaking oral history research within the retired Lighthouse Keeper community in South West Rocks.
- There is the potential to adapt the stables as an interpretation and introductory centre, with some retail activities.

Current and mid term proposals to facilitate cultural tourism include:

- The District is planning the adaptive re-use of the Head Keeper's cottage as B&B style accommodation.
- Upgrade carpark and picnic area to approved design, with about 35 spaces. This includes replacing the main entry gate and signage, improving the turning circle, centralising the existing collection of plaques and improving pathways.
- Upgrade walking tracks to the north of the lighthouse precinct.
- Upgrade kitchens and bathrooms in the Assistant Keepers Cottages and install internal WC in the southern cottage.
- Establish a building maintenance regime, now that the three cottages have been renovated and painted. This will include painting, pest control, plumbing, joinery, fittings damaged by visitors, equipment required by visitors, water tanks and drainage.
- Outstanding priorities identified by NPWS District staff include the development of a site specific Interpretation Plan since visitors are requesting this form of information already. This can be very simple items such as building names and a booklet with a potted history. Elaine Van Kempen, a local historian in Laurieon, has been commissioned to prepare such a historical outline.
- There is concern about the need to provide for handicapped access through the precinct from the carpark to the lighthouse. This is needed due to the steep nature of the current pathway. A “Garavanter” system or “golf buggy” is being investigated.
- There is a need for a site specific business plan, to guide the development and management of the place.
- There is a medium term potential to reconstruct the flagpole as an interpretive device and landmark element.
4.0 Primary Conservation Policies for the Smoky Cape Lighthouse

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part D of the Conservation Management and Cultural Tourism Plan, the following primary policies establish the essential conservation framework for the Smoky Cape Lighthouse.

- The Smoky Cape Lighthouse shall be retained and managed by NPWS as a key contributing component of the overall NPWS Lighthouse Collection.

- The Conservation Policies and Implementation Guidelines contained in the overall Conservation Management and Cultural Tourism Plan shall be applied, as appropriate, to the Smoky Cape Lighthouse.

- NPWS shall gazette the Lighthouse site as part of the adjoining Hat Head National Park, in recognition of its complex cultural and natural significance.

- NPWS shall conserve and manage the lighthouse complex as a collection of fine historic buildings and supporting site features that clearly express its original functional role and which has gradually evolved since initial construction in response to progressively developed coastal navigation technology and organisational practices. Recognition and respect for the evolving development of the complex from 1891 until the mid 1990s shall form a key basis for conservation and management of the buildings, technology, artefacts, archaeological sites and infrastructure. Refer to Section 17.1 of the main CM&CTP for the Conservation Principles related to fabric, features and associated artefacts of differing significance.

- Conservation of the Smoky Cape Lighthouse shall protect, respect and where appropriate enhance the identified and closely interrelated characteristics of cultural and natural significance of the place, in its own right and as a component of a larger state, national and international network of late 19th and early 20th century lighthouses.

- All essential and outstanding catch-up repair and conservation works to the buildings and site elements shall be undertaken within a period of one year.

- The buildings and site elements shall be conserved by the implementation and long term continuation of a rigorous, cyclical and appropriate maintenance regime, starting immediately. This regime shall seek to maintain the buildings and site elements in a character and condition that equates to the time when the complex was an operating lighthouse facility, with a full time staff.

- NPWS shall conserve and manage the immediate site and setting as a modified natural landscape with important cultural landscape characteristics that clearly illustrate the development and occupation of the precinct as an operational lighthouse complex, from 1891 until the mid 1990s. There shall also be recognition of the other layers of cultural history on the headland, including the defence activities and public recreation.

- NPWS shall conserve and manage the wider Smoky Cape Headland as a modified natural landscape with cultural landscape features that illustrate the layers of human occupation and settlement, including that by Aboriginal people.

- NPWS shall conserve and manage the Aboriginal heritage characteristics of the Headland in consultation with the relevant representatives of the local Aboriginal communities.

- NPWS shall conserve and manage the complex and its setting in a manner which communicates and interprets the multi-layered nature of its cultural and natural significance to the general public.

- NPWS shall facilitate the on-going operation of the lighthouse tower by AMSA as an operational navigation aid, within the framework of the Heads of Agreement between AMSA and the State of NSW.

- NPWS shall conserve and manage the complex by means of adapting the interiors of the former cottages and
support buildings to new uses which are identified in the site specific Interpretation and Tourism Plans and which are compatible with their evolved architectural and spatial characteristics and cultural significance.

- NPWS shall continue to conserve and manage the complex in the context of the Smoky Cape Headland being a popular tourism destination and lookout venue for whale watching. Internal adaption of the cottages and support buildings shall support approved uses associated with site management, interpretation and cultural tourism.

- In the medium term, NPWS shall utilise the Head Keeper’s Cottage for a combination of site administration, interpretation, retail, food services and visitor facilities. Initially the Head Keeper’s Cottage shall accommodate a caretaker and some visitor facilities, in order to maintain an appropriate level of site security. The Assistant Keepers’ Cottages shall continue as short term equitable holiday accommodation.

- With the exception of the new public toilet block in the carpark, there shall be no new permanent buildings erected within the immediate Lighthouse precinct. The design and positioning of any future navigational equipment or energy source infrastructure shall be carefully considered to avoid or minimise any adverse impact on the heritage or visual characteristics of the overall lighthouse precinct.

- NPWS shall severely limit the number of visitors’ cars that are permitted to park within the immediate precinct of the Lighthouse cottages, to those that can be accommodated in the existing garage. All other cars shall be accommodated in the public carpark.

- NPWS shall conserve and manage the Smoky Cape Lighthouse in full recognition of the heritage and environmental management provisions of the relevant aims, objectives, standards and procedures of the Australian Heritage Commission, NSW Heritage Council, NSW EP&A Act, Regional and Local Environmental Plans, the National Trust of Australia (NSW), NPWS and good conservation practice as promoted by Australia ICOMOS.

- NPWS shall co-ordinate the marketing and promotion of interpretation and cultural tourism activities at the Smoky Cape Lighthouse, with the overall NPWS Lighthouses collective resource by reference to the Lighthouses Marketing and Promotions Unit within the Community Relations Division.
5.0 Site Specific Conservation Policy Implementation

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part E of the Conservation Management and Cultural Tourism Plan, the following guidelines establish the essential implementation framework for the Smoky Cape Lighthouse.

The Conservation Policy Implementation recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

These site specific recommendations are framed in the same categories as the Conservation Policies and Implementation Guidelines of the main Plan, for ease of cross reference.

5.1 Reference to Main CM&CT Plan

SHORT TERM

- Refer to the Conservation Policy and Implementation Sections of the main NPWS Lighthouses Conservation Management and Cultural Tourism Plan. All of the following policies and implementation recommendations should be read in association with the larger policy framework.

- Participate in the Service wide review and assessment of the CM&CTP.

MEDIUM TERM

- Give special regard to the NPWS management recommendations and other general policies contained in the CM&CTP. In this regard, ensure that close liaison is maintained with all relevant stakeholders, particularly those concerned with heritage management and tourism operations.

- Manage the site in accordance with general NPWS management policies and guidelines.

- Review and update the Hat Head National Park Plan of Management in accordance with the findings and recommendations of the final CM&CTP.

- Facilitate the co-ordination of the Smoky Cape Lighthouse conservation management and cultural tourism activities with the remainder of the NPWS collective resource. In particular contribute experiences and lessons to the other Lighthouse managers through the Lighthouse Reference Committee.

5.2 Aboriginal Heritage Conservation Policy Implementation

SHORT TERM

- Review the findings of recent Aboriginal site surveys and the previously collected knowledge.

- Review the current consultation processes with representatives of the Aboriginal community.

- Prepare medium term plans for undertaking further site surveys which will enhance the overall understanding of the Aboriginal cultural resources.

MEDIUM TERM

- Undertake additional research and site surveys to expand the knowledge of Aboriginal cultural resources.

- Refine and expand the consultation process, utilising an MOU or appropriate mechanism with the local Aboriginal community. The consultation process should also address issues of Aboriginal involvement in planning decisions.

- Maintain active liaison regarding any Native Title issues that may relate to the Headland and the Lighthouse precinct.

LONG TERM

- Continue active consultation with the Aboriginal community to expand the
understanding of their cultural heritage and involvement with the management and cultural tourism programmes at the Lighthouse and the headland generally.

5.3 Landscape Conservation Policy Implementation

SHORT TERM
- Continue weed management programmes.
- Continue existing fire management regimes as appropriate and landscape maintenance of precinct.

MEDIUM TERM
- Review and prepare an inventory of the important natural and cultural landscape features of the Headland and the Lighthouse precinct, which must be protected into the longer term.
- Ensure that appropriate Aboriginal and historical archaeological research is undertaken before any major landscape management programmes are commenced.
- Complete landscape and vegetation surveys of the headland
- Prepare a weed management plan.
- Undertake upgraded weed management programmes on a cyclical basis.

LONG TERM
- Periodically monitor and review the weed management plan and upgrade as necessary.
- Maintain landscape planting and maintenance of the precinct.

5.4 Built Environment Conservation Policy Implementation

SHORT TERM
- Complete any outstanding components of the catch up repair programme.

MEDIUM TERM
- Implement a rigorous building maintenance programme for the various buildings on the precinct.
- Facilitate the on-going maintenance of the Lighthouse Tower by AMSA.
- Resolve BCA and OH&S upgrading of the tower in a manner which enables managed public access to take place in accordance with the Heads of Agreement but which does not degrade the heritage values of the tower.

LONG TERM
- Ensure that a rigorous maintenance plan is implemented for all buildings.
- Repair or replace deteriorated elements of building fabric, generally by replacing like with like.

5.5 Historical Archaeology Policy Implementation

SHORT TERM
- Review known information regarding historical archaeological resources.
- Collect copies of relevant historical documentary material that may provide background research in future archaeological assessments.

MEDIUM TERM
- Formulate an archaeological zoning plan for the Headland, taking particular note of the linkages to the nearby WW2 military facilities.
- Undertake additional archaeological assessments of areas with known potential, particularly if development or infrastructure proposals are under consideration.

LONG TERM
- Ensure that any archaeological management activities are undertaken in accordance with the NSW Heritage Act
and Service policies.

5.6
Lighthouse Precinct Conservation Policy Implementation

SHORT TERM

- Continue current programmes of site management
- Complete the upgrading of the carpark and public toilet block
- Research sewerage and water issues and implement preferred solutions.
- Ensure that existing levels of supervision and security are maintained
- Maintain rigorous rubbish management programmes.
- Undertake a traffic study to address parking issues.

MEDIUM TERM

- Continue to upgrade headland walking tracks and picnic areas in discrete locations
- Monitor the number and flow of visitors and buses into the established car parking area, particularly in peak periods.
- Restrict visitor car access into the immediate precinct to those required for disabled drop-off or only during the evening after day visitors have departed.
- Progressively monitor site safety issues. Upgrade as required, after consideration of likely impact on significant characteristics.
- Review site security activities and consider the potential for maintaining security without the need for an on-site caretaker living in the Head Keeper’s cottage.
- Liaise with AMSA to ensure that the progressive introduction of new navigational technologies into the overall precinct does not negatively impact on the significant characteristics.

LONG TERM

- Reconstruct the flagpole.
- Identify and develop new carparking further down the hillside, even if it means creating a number of small sites.
- Monitor the need for an alternative system of providing the majority of visitor access to the Lighthouse precinct, such as by using mini buses from a remote car parking or drop off area during peak periods.
- Avoid the construction of any new buildings within the Lighthouse precinct or in the visual curtilage established by the mountain backdrop. Careful design and siting is required should the construction of new navigational aids be required.

5.7
Building Adaption Policy Implementation

SHORT TERM

- Complete the upgrading of kitchens and bathrooms of the Assistant Keepers’ cottages for holiday accommodation.
- Complete the initial upgrading of the Head Keeper’s cottage for caretaker and partial B&B accommodation.

MEDIUM TERM

- Arrange for the re-use of the Head Keeper’s cottage, to provide the range of interpretive, retail, food services and management support that is emerging as a successful direction for a number of the other NPWS Lighthouses, while achieving an appropriate level of site security that is currently provided by the caretaker role.
- Consider alternative uses for the former stables building once the Head Keeper’s Cottage has been adapted to a full range of interpretation and visitor facilities.
- Prepare REFs, submit and gain approval for any new identified direction.
LONG TERM

- Ensure that any future building adaption programmes respect the architectural nature and spatial arrangements of the particular building.
- Ensure that any future programmes of re-use are undertaken in accordance with the recommendations of the site specific Interpretation Plan.

5.8 Interpretation Planning Implementation

SHORT TERM

- Co-operate in and contribute to the implementation of the NPWS Lighthouses Collective Resource Interpretation Plan.
- Consolidate relevant historical documentary and other material.
- Identify any likely subjects for oral history capture, from both the Aboriginal community and those who were part of the operational phase. In particular continue liaison with the former Lighthouse Keepers who have retired to South West Rocks and any others known to these people.
- Commission and implement a site specific Interpretation Plan, to be prepared within the framework of the NPWS Lighthouses Collective Resource Interpretation Plan.
- Determine and implement a preliminary interpretive signage programme which will not conflict with the full range of recommendations of the site specific Interpretation Plan.

MEDIUM TERM

- Implement the recommendations of the site specific Interpretation Plan.
- Implement oral history programmes.
- Implement image capture programmes.
- In accordance with the Interpretation Plan, supplement interpretive signage within the precinct.
- Incorporate the nearby former military installations into the interpretation programmes of the Lighthouse precinct.
- Provide interpretive displays in the rooms at the base of the Lighthouse tower not otherwise used by AMSA.

LONG TERM

- Periodically review and upgrade the site specific Interpretation Plan and interpretive activities.

5.9 Cultural Tourism Policy Implementation

SHORT TERM

- Continue the Discovery Ranger and other community support programmes for periods of peak visitation.
- Any upgrading of the stables building for interpretation activities should include a “welcome” function and low key food and beverage sales.
- Consolidate background information on visitor patterns and tourism opportunities for the Headland.
- Continue the use of the garages for holiday guests in the cottages.

MEDIUM TERM

- Prepare a site specific tourism plan.
- Provide a “golf buggy” style vehicle for use by elderly and disabled visitors ascending “Heart Attack Hill”, similar to that used at Montague Island. Make the vehicle available for transferring the luggage of holiday guests in the cottages.
- Promote the limitation of overnight or long stay guest vehicle numbers on site, by severely limiting their parking area to the vicinity of the garages, or in the less secure public carpark. Encourage guests to make other parking arrangements for additional cars within a secure location in the South West Rocks village.
- Establish regular Lighthouse information and familiarisation programmes for the
people who staff the Local Tourist Information Office.

- Liaise with AMSA regarding the provision of carefully supervised tours up the Lighthouse tower, in accordance with the Heads of Agreement.

- Consider the provision of a café style operation as part of the Head Keeper's cottage, including possible spill over use of the side verandah. Avoid any permanent shade or recreation structures.

- Periodically review and amend any operator licences for the organised recreational activities that may take place on the Headland.

- Periodically review and amend operator licences for the organised recreational activities that may take place on the Headland.

- Facilitate the incorporation of the nearby Trial Bay Gaol into Lighthouse locality cultural tourism programmes.

LONG TERM

- Monitor cultural tourism programmes.
6.0

Bibliography

6.1

Documentary Sources


NPWS Correspondence

South West Rocks Property Services, *Information Brochure on Lighthouse Cottages, Lighthouse Road, Smoky Cape*, 1998, with text from NPWS.


The Macleay River Historical Society, South West Rock Branch, *Historic South West Rocks, First Surveyed in 1866 as part of the Town of Arakoon at Trial Bay*, undated.

6.2

Illustration Sources

In addition to those sources noted on individual photographs, the following sources relate to the identified photographs.

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*From Dusk Till Dawn*, pp. 89
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Introduction

1.1
Relationship to main Conservation Management and Cultural Tourism Plan

This Supplementary Information on the South Solitary Island Lighthouse supports the NPWS Lighthouses Conservation Management and Cultural Plan. It provides site specific Building and Site Description Overview, with information and analysis to assist the relevant NPWS managers translate the findings and recommendations of the main Plan into the site specific issues.

This Conservation Management and Cultural Tourism Plan and this Supplementary Information supersede the South Solitary Island Conservation Management Plan prepared for the Commonwealth in 1996.

In accordance with the project brief, the information contained in Section 2 of this Supplementary Information has been drawn from the Commonwealth’s Conservation Plan but summarised and rearranged for consistency across the whole NPWS Lighthouses resource.

The information on Aboriginal heritage and its significance to Aboriginal people, is based on the research and discussions undertaken by Mary Dallas during the preparation of the main Plan.

The detailed historical background and building analysis contained in the Commonwealth’s Conservation Plan has been reproduced and is attached to this supplementary plan as reference material.
LOCATION PLAN (TOPOGRAPHIC MAP EXTRACT)
2.0
Understanding the Resource

2.1
Historical Background

ABORIGINAL MYTHOLOGY

The local Gumbaingirr Tribal Group have traditional associations with the islands which are part of a creation mythology and series of stories along this part of the coast. There have been no investigations of the Island to reveal any prehistorical sites. Given the difficulty of access, it is unknown but unlikely if there were any historical associations with the Island and there are no current uses by Aboriginal people.

EUROPEAN DISCOVERY & EARLY SETTLEMENT

The group of small, offshore islands, which includes South Solitary was charted and named by Captain Cook in 1770. Cook did not attempt to land on South Solitary and there is no record of any European visit until 1877.

Coastal shipping was the economic life-blood of the settlements along the north coast of NSW throughout the 19th century and well into the 20th. Timber-getting was a major industry from the 1830s and the area sustained much prime agriculture. Many of the small settlements developed their own ship building industries, constructing both river craft and sea-going vessels. The development of Queensland as an independent state after 1859 greatly increased the level of shipping along the coast, reinforced by the North Queensland gold rushes of the 1870s.

While the river ports experienced difficulties with hazardous bars at their ocean entrances, the coastline was well known for its dangerous promontories, offshore rocks and numerous islands. With increasing traffic the number of shipwrecks grew alarmingly in the 1870s. With the creation of a NSW marine Board in 1872 and an Inter-Colonial Conference in 1873, the pace of lighthouse construction gathered pace. Between 1872 and 1891, some 12 lighthouses were established, all of them designed by the Colonial Architect, James Barnet. Cape Byron was to follow in 1901. Of these lighthouses, those at Sugarloaf Point (1875), South Solitary Island (1880) and Cape Byron, are the major "highway" lights, supported by Lighthouse Keepers' Cottages. The remainder were smaller headland or harbour entrance lights, often with only a small engine room or oil store to support the squat lighthouse tower.

DEVELOPMENT OF THE LIGHTHOUSE

In 1877, acting in accordance with the resolutions of the 1873 Conference, James Barnet landed on South Solitary Island to select the location for a future lighthouse. Detailed plans were drawn the following year and tenders called. The successful tenderer, John McLeod had previously constructed Sugarloaf Point to Barnet's designs.

McLeod erected a series of temporary barracks style huts for his workmen, just north of the proposed location of the lighthouse tower. He also constructed a tramway down the spine of the Island to the site of the current jetty, where several attempts were made to erect a structure that would withstand storms and enable construction to continue.

The buildings were constructed of mass concrete, with cement delivered in wooden casks, sand from the Macleay River and ground stone from the Island itself. The entire lighting mechanism was supplied by Chance Bros. The light being a first order dioptric revolving white optic, with eclipses every thirty seconds. The lamp was replaced in 1975, when the complex was automated and is held in the Coff's Harbour and District Historical Museum.

Barnet expected the construction to be completed in 1879 and had this date carved for the keystone over the Lighthouse entry doorway. In fact the light was first exhibited on 18 March 1880. The two cottage buildings had curved roofs on every element except the lean-to fowl shed. It is likely that this roof form proved unsatisfactory as the buildings were re-roofed in 1894 by George Boothby, to the current shapes. The original contract also included a high protective wall to provide shelter for the Keepers as they went from their quarters to the tower. Close to the tower were the flagstaff for signalling and the small round roofed concrete structure in which the signalling flags were stored.

The Keepers inherited a goat herd from the building contractors and soon filled the lean to fowl house in the backyard designed by Barnet which remained in use until 1934 when it was finally replaced.
For the first 50 years supplies and basic stores were brought direct from Sydney by coastal traders every three months. This is the reason for the large, fully shelved store rooms in all of the quarters.

The severe conditions caused by the exposed location led to a series of rebuilding and substantial repairs to most of the Island features. The roof design of the quarters was radically altered to the present configuration in 1894. At the same time new wash houses were constructed next to the fowl houses.

The new corrugated iron roof did not last long, after ten years it was replaced to terra cotta or slate. Only the verandahs, fowl houses, new wash houses remained with corrugated iron roofs in 1904. A new jetty was also constructed in 1904.

Shipping was the vital link with the Island and in 1913, 1914 and 1915 the jetty was repaired, the crane and landing stage extended. In 1932 the jetty was further reconstructed it was not until 1957-9 that the old jetty was finally superseded.

New communication had reached the Island in 1937 in the form of the wireless operated by morse code keys. However it proved unreliable being Army surplus and the security of the Morse signal light which had replaced the flagstaff in 1910 was preferred.

Meanwhile access to the island continued by ship. The first known helicopter landing was in January 1958. In 1974, just before the Lighthouse Keepers were removed from the island the flag pole was removed and a square concrete pad was laid as a helicopter landing place. As the jetty has also been left unattended since 1975, helicopters have been the only safe way to access the island.

The Lighthouse was automated in 1975 and the historic optic and pedestal were removed for storage in the local Museum. The Lighthouse tower is still operated and maintained by AMSA. The remainder of the buildings on the Island are vacant and managed by Australian Property Group.
2.2 Description of the Setting

THE COASTAL EDGE

South Solitary Island lies some 8 kilometres off the mid north coast of New South Wales, to the north east of Coffs Harbour. The closest point on the mainland is the Look At Me Now Headland.

The Island is visible from coastal vantage points in good weather, while the operational light is readily apparent from a wider stretch of coastline at night. Look At Me Now Headland was the site of the historic flagstaff and telegraph station which provided the early communications between the Lighthouse and Coffs Harbour.

South Solitary is within the Solitary Islands Marine Reserve, an area of approximately 85,000 hectares, that stretches north from Muttonbird Island off Coffs Harbour to Plover Island in the north. Within the overall reserve, the majority of the other islands are managed as Nature Reserves. The majority of these islands have remained free from introduced animals and fire, ensuring that the vegetation has remained in a relatively undisturbed natural state, when compared with South Solitary.

The density of marine life around these islands is considered to be amongst the most outstanding in NSW. The area is at the confluence of warm northern currents flowing southwards from the Great Barrier Reef and cooler currents flowing north from Tasmania. The resultant mix of both tropical and cold water species is remarkable, with the group known as the southernmost limit of many reef building corals.

In common with similar coastal areas, the waters around South Solitary Island are on the migration routes for humpback whales.

Weather conditions on the Island can vary dramatically and change very quickly. Strong winds and heavy seas make access and departure extremely hazardous, even for helicopters. In the worst weather conditions, the entire upper portions of the Island are affected by salt spray. There is at least one shipwreck site on the eastern side of the Island.
THE ISLAND SETTING

South Solitary Island is, in fact, four separate islands; Lighthouse or Main Island, Birdie Island, Archie Rock and an unnamed islet to the north east. Archie Rock has the most dramatic geographical structure of all the Solitary Islands, climaxing in a fine natural arch on the south side. Encircled by a rocky, precipitous coastline, the Island is entirely without beaches or natural landing points. The rocky landscape provides a thin covering of soil to support little vegetation beyond harsh scrubby grass and herbaceous communities, some of which is left over from the cultivated landscape that once surrounded the cottages.

The terrestrial environment on the upper reaches of South Solitary Island supports fire sensitive and wind and salt-tolerant plant species. Any trees that had been cultivated have died.

The vegetation has been heavily impacted over the past 100 years by the introduction of goats and rabbits to support the lighthouse staff. In addition, the steeply sloping cliffs are subjected to heavy salt spray and wave action, resulting in two distinctive landscape zones; the cliffs or steep slopes and the gentle upper slopes. It is an excessive and harsh environment for the cultivation of landscape.

The South Solitary Islands have long been recognised as important breeding sites for seabirds, particularly the Wedge-tailed Shearwater or Muttonbird. South Solitary itself supports a considerable nesting seabird population, although the vast numbers of Crested Terns and Silver Gulls appear to currently outnumber the Shearwaters. The Island is also the northernmost breeding place for Little Penguins.

No rabbits survive, while goats and dogs are no longer on the Island, following the automation of the Lighthouse in 1975. Sightings of a legless lizard, identified as Burton’s Snake Lizard, have been made as recently as 1994. The other islands that make up South Solitary are uninhabited and were never used for the Lighthouse operation. Retired Lighthouse staff noted in 1998, that the Island was infested with large centipedes, which were particularly active at night.
ABORIGINAL RESOURCES

It is not known whether the Aboriginal people ever set foot on the Island, no Aboriginal archaeological remains have been found on the main Island, however no systematic investigations have actually been carried out to date.

THE LIGHTHOUSE PRECINCT

The Lighthouse Precinct has a different sense of composition than many of the other complexes, spreading out as it does across the upper slopes of the Island. The cottages are linked to the relatively remote tower by a continuous wall that provided the Keepers with some protection from harsh weather conditions.

The Lighthouse tower is set on the southern most end, at the highest elevation. It is accessed by a path and wall connecting directly to the two main cottages, located some distance away to the north. A small precinct of former barracks buildings lies between the Lighthouse tower and the cottages. These were used during the construction of the complex in the late 1870s but are now only remnant archaeological sites.

The two cottage structures form a strong built environment in the centre of the Island, each is surrounded by a walled enclosure that extends the lines of their external walls, forming tightly defined mini precincts, set against the harshness of the elements. The pathway continues past the cottages, heading north to the elevated steel framed jetty that projects from the Island. The various high level jetties that have occupied this location provided the only form of reliable access from ships servicing the Island. The overall precinct contains numerous sites of archaeological potential, related to structures associated with the initial construction phase, site works and the extensive original drainage system.

The landscape within the lighthouse precinct consists essentially of the hardy grasses and herbaceous plant that exist across the whole island. There is some evidence of domestic planting in more sheltered courtyard areas adjacent to the quarters, but it is in extremely dilapidated condition, mainly due to extremely harsh conditions and its having been abandoned since 1975. The Lighthouse Keepers kept goats and chickens. Beyond these there was little capacity for self sufficiency, unlike many of

the mainland Lighthouses. Sweet potatoes in the 1930s were the only vegetable known to have succeeded in the harsh climate. There was never a cow on the Island and all milk was powdered.
SOUTH SOLITARY LIGHTHOUSE
BEACON OF LIGHT ZONE, 1998
Not to Scale
Graham Brooks & Associates Pty. Ltd.
2.3
The Constructed Image

There are four principal building structures on the Island, comprising:

- The Lighthouse tower
- The Head Lighthouse Keeper’s Cottage
- Two semi detached dwellings for the Assistant Keepers
- The elevated Jetty structure and store

THE LIGHTHOUSE TOWER

The Lighthouse tower is a conical, or slightly tapered, cylindrical structure of mass concrete construction finished externally with white painted cement render. It is maintained by AMSA and remains as an operational navigation aid.

The tower composition is considered as a fine example of the work of the Colonial Architect, James Barnet. It is some 17 metres high and is surmounted by a lantern house which contains the optic which replaced the original Chance Bros lantern in 1975. The simplicity of the rather squat tower is enlivened by the projecting balcony, supported on a simple moulded cornice, with the typical Barnet style outwards sloping gumnut balloon railing.

At the base of the tower is a small annex, attached to the northern side and containing the original oil store. This structure is also of mass concrete and its classical lines form a visual counterfoil to the tower.

A circular cast iron geometric stair winds up the inner face of the tower walls, providing access to the upper stone external balcony and the new lantern house, which is constructed of cast iron, wrought iron and fibreglass. Trapezoidal shaped glazing in aluminium frames provides little interruption for the light. The current lantern is a Chance 3700mm diameter murette surmounted by the NALI fibreglass and aluminium lantern, now powered by solar panels. The light is set at an elevation of 58 metres and has a range of 17 nautical miles.

HEAD KEEPER’S COTTAGE

The free standing, single storey Head Lighthouse Keeper’s Cottage comprises the main cottage, the service pavilion and several small outbuildings, all enclosed in a perimeter wall. The cottage contains three Bedrooms, Living Room, Office or Dining Room and Store Room, now fitted out as a Kitchen. It is a good example of the typical Victorian Georgian style used by the NSW Colonial Architects Office for many of the late 19th century residences.

It was surrounded on four sides by a deep verandah, and was connected to the free standing former Kitchen block by a covered way. On either side of the Kitchen were fuel shed, toilets and fowl house. The building was constructed of mass concrete, with load bearing walls and a timber framed floor. The timber framed hipped roof is now sheeted with corrugated compressed asbestos, as are the verandahs, covered links and outbuildings.

Later alterations, in the 1960s included partial enclosure of the verandahs for weather protection and the installation of additional bathrooms, an enclosed laundry in the rear yard and the equipping of the former store in the cottage as a kitchen. The building is in dilapidated condition, but the survival of the roofing has stabilised deterioration.

ASSISTANT KEEPER’S COTTAGES

These cottages are semi detached under a single hipped roof and share a set of outbuildings that are also joined by a common party wall.

Each cottage comprises two Bedrooms, Living Room, and former Store, arranged around a central through corridor. The outbuilding contains the former Kitchen, storerooms and laundry. Each cottage is enclosed by verandahs and has its rear yard defined by a perimeter wall.

Construction materials and architectural style match those of the main Cottage, as does the pattern of alterations and extent of deterioration.

Attempts have been made over the years since 1975 to stabilise the cottages, given the harsh environmental conditions. These attempts have slowed deterioration but the overall condition of the cottages can only be described as fair to poor, despite their solid construction. The asbestos roofs are gradually shattering along the eaves-lines, progressively enabling water damage to penetrate into the interior fabric.
The remnant gardens within the enclosed yards and associated with the Lighthouse Keepers have been left to return to the dominant vegetation patterns on the Island.

THE ELEVATED JETTY

The current steel framed jetty is the third structure to fulfil this function in this location. The first, a low level structure, was constructed in 1878 and stood five metres above sea level, while the second, a larger structure, replaced it in 1904. Archaeological evidence remains of both these structures.

The current steel framed jetty was constructed in 1959, standing some 13 metres above sea level. Like the second jetty, it has an outward leaning seaward support. The jetty was provided with rails to move the crane and a metal mesh walkway with tubular iron railings on the north side of the access bridge and on both sides of the jetty proper.

The jetty is located on the north western side of the Island and faces the mainland. It is the only such jetty within the NPWS collection and is a major visual expression of the isolated lifestyles of the Keepers.

The metal mesh walkways have rusted through and the jetty is unusable, with the crane stranded out at the seaward end. The steel structural frame of the jetty is in poor condition, with a number of proposals over the years by AMSA to demolish it for safety reasons.

JETTY STOREHOUSE

It is considered likely that the current Jetty Storehouse was erected in 1879-80 to replace the earlier building that was destroyed in a gale. It is constructed of mass concrete and is a simple rectangle in plan with a pyramidal hipped roof, sheeted in corrugated iron. It is in poor condition.
2.4

Significance

HISTORIC SIGNIFICANCE

South Solitary Lighthouse is important as one of only two substantial and relatively intact late 19th century lighthouse complexes located on an island off the NSW coast.

It is an important and representative example of the so called, "coastal highway lighthouses" designed to light the NSW coast in the late 19th century. It was constructed during one of the most productive phases of Lighthouse construction in NSW.

It is the only Lighthouse with a gantry construction, dramatically emphasising the remoteness of the island location and the organisation of the complex in resupply.

AESTHETIC SIGNIFICANCE

South Solitary Island Lighthouse is one of a suite of lighthouses designed by the eminent Colonial Architect, James Barnet, both the tower and the quarters are fine examples of his work. Examples of the extravagant and eclectic design, they are typical of the late Victorian period, but are one of the few to adopt the symmetrical support structures at the base of the tower, a reflection of the original Greenway design for the 1818 Macquarie Light. To this extent the tower has similar architectural characteristics as the Smoky Cape, Sugarloaf Point and Barrenjoey Lighthouses.

It provides an evocative landmark which contributes strongly to the sense of place for the users of the surrounding marine park.

The complex contains high quality buildings and structures of architectural and technical excellence; located in a dramatic cliff top setting. The building form of the tower and residential quarters have great aesthetic appeal as a powerful and evocative composition in a treeless landscape and contrast with the dramatic natural features of the island setting. The tightly arranged courtyards behind the cottages and the protective walls that connected them to the Lighthouse, clearly illustrate the intensely adverse environmental conditions under which the Keepers lived and worked. The projecting steel latticework of the jetty is a most lucid illustrator of the isolated lifestyle practiced by the families of the Keepers as they ensured the safety of coastal shipping.

Its landmark scenic qualities and historical associations mean that the Island and its Lighthouse are held in high esteem by the Coffs Harbour community and the recreational and commercial users of the surrounding Marine Park. The Lighthouse is a familiar and evocative landmark for the many scenic and whale watching cruises from Coffs Harbour.

SOCIAL SIGNIFICANCE

The Lighthouse has strong social significance to the local community, expressing the maritime nature of early trade and communications to the port of Coffs Harbour.

There is a growing sense of community ownership and social significance of the lighthouse and supporting buildings. The light is clearly visible at night from the tourist beach resorts north of Coffs Harbour.

Occupied for 75 years it is associated with a number of lighthouse keepers and their families. The complex interestingly is noted for the large number of children that lived on the island during its operational life.

The Lighthouse cottages are regarded by the local community as the oldest surviving residential buildings in Coffs Harbour.

SCIENTIFIC SIGNIFICANCE

The tower and cottages are thought to be the earliest mass concrete lighthouse construction in Australia and one of three in NSW to employ local rock as aggregate for the concrete.

The overall precinct contains numerous sites of archaeological potential, related to structures associated with the initial construction phase, site works and the extensive original drainage system.

These archaeological resources have the potential to provide evidence about the whole period of habitation on the Island. This significance is enhanced because the arrangement and past operation of the Lighthouse are unusually legible, including the changes which took place in the means of landing supplies at the various jetties. The current high level jetty is the only one of its type along the entire NSW coastline and is rare in the Australian context.
The Island is a significant fauna sanctuary.

SIGNIFICANCE TO ABORIGINAL PEOPLE

The significance of South Solitary for the local Aboriginal people is the island and its mythological significance, not the actual lighthouse complex.

The local Aboriginal community see the island as an important part of their heritage.

ELEMENTS OF PRIMARY AND CONTRIBUTORY SIGNIFICANCE

Grading the comparative significance of various elements or characteristics of an historic place or building is a useful management approach to support future programmes of detailed fabric or artefact conservation.

The majority of the conservation management plans prepared for AMSA, or in this case the Commonwealth, included a graded table of significance for the various components of the lighthouse complexes, including landscape and archaeological features and of individual buildings.

The subsequent allocation of graded levels of significance in some of the CMPs is considered by this consultant to be overly complex and not beneficial in terms of providing a clear background to the conservation and management of building fabric or other elements.

The conclusions reached by the consultant team preparing this overall Conservation Management Plan have taken a different emphasis.

The characteristic considered to be the most important in relation to the NPWS Lighthouses is the manner in which they have evolved progressively while retaining their essential integrity and significant features. Accordingly a three tier significance rating has been adopted.

- Characteristics of Primary Significance
- Characteristics of Contributory Significance
- Characteristics of Little or No Significance.

Primary Significance:

All those elements and features that relate to the initial construction and operation of the particular Lighthouse and its supporting buildings and infrastructure. It includes the pre-existing topographical and landscape characteristics, initial cultural landscape features and sites of Aboriginal cultural significance.

Contributory Significance:

All those elements which relate to the subsequent use and development of the place as an operational Lighthouse, right down to the period when they were transferred to NPWS or other relevant agencies such as Australian Property Group (South Solitary Island) or the Cape Byron Headland Trust. It includes subsequent natural and cultural landscape features and post contact period sites and places of Aboriginal cultural significance.

Elements Of Little Or No Significance:

Generally only those items which relate to the subsequent re-use and development of the place after it was transferred to NPWS.
3.0 Constraints & Opportunities

This section confirms the listing status by various heritage agencies for the South Solitary Island Lighthouse and summarises the views of relevant community members or representatives.

Refer to the main Plan for guidance with regard to the appropriate actions to be taken in relation to these listing s and viewpoints.

3.1 Heritage Recognition & Listing Status

NATIONAL AGENCIES

South Solitary Island Lighthouse is listed on the Register of the National Estate administered by the Australian Heritage Commission.

South Solitary Island is owned by the Commonwealth of Australia and managed by the Australian Property Group. The current owners and managers are required to care for and conserve the cultural heritage resources of the Island in accordance with the Australian Heritage Commission Act.

NPWS are negotiating with the Commonwealth to assume control of the Island, at which time it will come under the heritage management requirements of the Service and the NSW Heritage Act.

STATE AGENCIES

The primary conservation and management framework for the Lighthouse is the NSW National Parks and Wildlife Act. The site of the Lighthouse complex is not currently gazetted within a National Park. A Plan of Management will be prepared once the Island or the Lighthouse precinct is gazetted.

South Solitary Island Lighthouse Group is listed in Schedule 2 - Heritage Items of State Regional Environmental Significance in the North Coast Regional Environmental Plan, Draft Amendment No 3, 1998.

South Solitary Island Lighthouse is scheduled to be included in the NPWS s170 Heritage and Conservation Register, under the NSW Heritage Act and NSW Heritage Amendment Bill 1998, once ownership of the island is transferred to NPWS from the Commonwealth.

South Solitary Island is likely to be promoted by NPWS for listing in the State Heritage Register, once NPWS gains ownership.

LOCAL GOVERNMENT

The South Solitary Island Lighthouse Group is not listed in the Coffs Harbour LEP, the Island actually falls out of the Council’s boundaries.

NATIONAL TRUST OF AUSTRALIA (NSW)

The South Solitary Island Lighthouse Group has been classified by the National Trust of Australia (NSW).

ABORIGINAL COMMUNITY

The Coffs Harbour LALC are associated with the South Solitary Island Lighthouse.

Native Title Claimant groups include representatives for the Gumbaingerr Mudjali Elders of Coffs Harbour, whose claim covers vacant crown land in Parishes of Moonee, Coffs and Bonville and includes the offshore islands. Other claimant groups in the area, which at present have no claims, are Garby Elders, Gumbilar Jillipi Elders, Goophing Group, Red Rock Elders and Widji Miral Tribal Elders Group.

The area is currently used for fishing by Aboriginal people. Groups fish from boats off the Island but do not land on it. Continuity of fishing rights is expected.

Consultation with the Aboriginal community currently takes two forms. Site management issues are discussed informally on an as needs basis. There have been recent attempts at a more formal approach in the area by the Marine Park Authority in the establishment of an Advisory Committee and positions to undertake liaison with the Aboriginal Community and other stakeholders. Difficulties have arisen where some of the Aboriginal Groups do not care to meet each other but prefer discussions separate to other groups.

The various groups including the LALC want more direct involvement in planning and management of the area, with more consultation over a broader range of issues. Major issues concern site protection, tourism, access and hunting and fishing rights.
A committee should be established to act as a "conduit" between the community and the NPWS, who will continue to liaise with the Aboriginal community on a site by site or project specific basis. This would aim for cooperative joint management of the island in matters of land management, site protection, fishing rights, cultural tourism and community access. The management style should remain informal but the management structure to be reviewed and be based on a Memorandum of Understanding.

The LALC is developing a cultural tourism and business plan for the coastal region. The Islands would be included as part of guided fishing and boating tours. The want to be consulted on and have a say in the nature and commercial aspects of tourists on and around the Islands. The LALC are concerned that important information about the creation stories and myths of the area are used by the white community to their advantage but not for the Aboriginal community.

LOCAL COMMUNITY

South Solitary Island has symbolic value to the local and tourist community at Coffs Harbour primarily due to the fact that the Island is present on the horizon and is an important part of the viewing experience of the coast.

In addition to tourism operators a number of communities have expressed interest in the island and Lighthouse Precinct for a number of different reasons relating to the natural and cultural aspects of the Island. Recreational users, scuba divers and underwater photographers, fishermen and research groups to name a few.

Coffs Harbour and District Historical Society has an ongoing interest in conserving and displaying documentary material and moveable heritage from South Solitary Island. The Chance lantern is held in the Society's museum in Coffs Harbour.

An additional workshop was held in August for those specifically interested in the future of the Island and its potential tourism opportunities. Included in those who participated were a number of former staff members or their families, including the last Keeper, local historians, several local tourism operators, a representative from NSW Waterways and NSW Fisheries.

It was generally agreed at that workshop that the island and the lighthouse were of very great importance and must be conserved. It was recognised that since reasonable public access was almost tourism activities on the island would take place in the short term. No real conclusions were arrived at about long term use or tourism activities.

The District Office has a record of the attendees at the meeting, some of whom have excellent contributions to make regarding oral history of life on the island and at other NSW lighthouses.

TOURISM OPERATORS

Various community organisations and private individuals have expressed interest in using the Island as a tour destination or for accommodation. Tourist visits by helicopter have also been proposed on half-day basis featuring champagne breakfasts on the Island.

Currently boat tours are operated around the Island specifically highlighting the marine and natural features such as the whales, penguins and bird habitats. Tourism opportunities are basically those related to recreational use of the Marine Park, which are steadily increasing as more tourist cruise programmes and vessels are introduced. Whale and dolphin watching and Dinner Cruises are popular activities.

NPWS should ensure that the Tourism Promoters, Cruise Boat Operators and Marine Park managers are all conscious of the Lighthouse as a major landmark and symbolic presence in the Marine Park.
3.2
Conserving the Cultural Resources

THE CONDITION OF THE BUILDINGS & STRUCTURES

The tower is in good overall condition, being maintained to a minimum level by AMSA. Deterioration problems were noted (in a NPWS inspection report of January 1997) as including water penetration to internal walls of single storey store due to the failure of a box gutter, severe corrosion of the entry door and frame, with cracking of surrounding concrete walls, decayed timber cornices, corrosion to supporting steelwork to tower platform, poor sealing of tower platform and mould growth on internal walls.

The cottages have been allowed to deteriorate since the removal of the Lighthouse Keepers in 1975 and are in a poor state. The asbestos roofing an rainwater disposal systems have failed in many places, causing water damage to many of the internal fittings and finishes. There is an invasion of vines and grasses into the courtyards and buildings, including into the roof structures, the timber detailing and joinery to the cottage verandahs are in poor condition, all internal rooms show water damage to ceilings and walls, particularly the rear rooms and kitchens. Most of the window and door joinery remains intact although extensively weathered due to loss of paint systems. There is some vandalism damage to kitchen and bathroom fittings and cupboards.

The elevated gantry is in very poor condition, with extensive rusting of the steel framing and deterioration of the walkway decking.

The most critical priority for the South Solitary Lighthouse is for its future to be determined and its physical fabric to be secured against continuing deterioration.

NPWS and the Commonwealth are continuing to negotiate about the transfer of the Lighthouse to the Service. Contingent on this transfer, NPWS are keen to resolve the issue of the compressed asbestos roofing. If the buildings are to be allowed to deteriorate into ruins the asbestos removal process will be costly and difficult. If they are to be "mothballed", then repairs are necessary in the short term.

The gantry is in relatively poor condition and subject to powerful forces of deterioration. Access onto the gantry platform is not wise.

The Commonwealth have been trying for years to have the gantry demolished and it does represent a major expenditure to simply stabilise the structure.

It is not acceptable, given their significance and role within the collective resource of NSW Lighthouses, that the cottages and the gantry be allowed to fall into a ruinous state, precipitating future demolition.
CULTURAL & NATURAL LANDSCAPES

The coastal edge includes large areas of Marine Park and coastal edge including sections of National Park or forest which provide an essentially natural backdrop to Island. In addition to the natural features the nearby coastline also included cultural aspects. There are WW2 defence installations at Coffs Harbour and the neighbourhood, including remains of a battery, an underground signal station, now being managed by Council, and an observation post. Nearby Groper Island is known to contain unexploded shells from wartime firing practice.

The coastal edge is dominated by the sea. The visibility of the various coastal Islands influences an outward looking emphasis and heightened by the fact that density of marine life around these islands is considered to be amongst the most outstanding in NSW. The whales pass by on their way north in July/August and on their way south in September/October.

There are a number of vantage points along the coast from which to gain reasonable view of the Island and the lighthouse. The closest to Coffs Harbour is the mountain top lookout in the Bruxner Park in the Orara State Forest.

The most relevant observation place is from "Look at Me Now" Headland, north of Coffs Harbour, within the Moonee Beach Nature Reserve. The Dammers Point old signal flag memorial has good potential for interpretation signage. The nearby Shelly Beach headland contains some graves from a recent shipping tragedy.

As noted in Section 2.2 of this Supplementary Information, the Island consists of a heavily modified landscape which is gradually returning to a natural state since being abandoned in 1975. The group of islands in the South Solitary Group now from an important bird sanctuary.

The Lighthouse continues to serve a critical navigational aid is a distinctive landmark in the Marine Park. While the Island has remarkable natural characteristics and is a major bird nesting sanctuary, the strong visual and historical presence of the Lighthouse, its cottages and gantry indicate that the cultural significance must be managed in concert with the natural features.

ABORIGINAL CULTURAL RESOURCES

The coast and islands continue to form an important part of the mythological landscape of the region for the Gumbaingirr people. The coastal headlands are also important for the Aboriginal community. "Look at Me Now" has an important place in the creation story. These headlands provide a good potential for Aboriginal interpretation, if the local community so desire.

In terms of the islands, fishing rights and community access is also an important aspect for the Aboriginal community.

There have been no Aboriginal studies or surveys conducted on the island to date. Potential research and interpretive themes relate to prehistoric occupation, sites and land and sea use.

HISTORICAL ARCHAEOLOGICAL RESOURCES

The Lighthouse Precinct has the potential to yield information related to the initial construction phase of the complex and subsequent use and development of the area through the surviving archaeological material.

The jetty and earlier jetty site, concrete bases and early barracks sites are just a few elements which can tell of the use and development of the Island.

The whole of the upper spine of the island should be regarded as an area of high archaeological sensitivity.

NAVIGATIONAL AIDS

Maintained by AMSA, the Lighthouse continues to serve a critical navigational aid function and is expected to continue as an operational navigational aid to coastal shipping.
3.3 Other Management Issues

PRECINCT & SITE MANAGEMENT

South Solitary Island is located within a recently established Marine Park, previously known as a Marine Reserve. There is a Marine Park Authority which manages the overall precinct.

There are currently 24 non extractive permits for activities within the Marine Park. These include for fishing and tourism, whale watching and general scenic tours.

The impossibility of reasonable access makes any future direction for South Solitary the most problematical in the NPWS collection.

The lighthouse tower and a strip of land to the helicopter pad, is still leased from the Commonwealth and managed by AMSA. They maintain the tower and the light and co-operate with NPWS in providing joint helicopter access when they make their periodic maintenance trips.

The island remains as the property of the Commonwealth Government and is administered by the Australian Property Group. NPWS is negotiating for the transfer of the island, which is expected to be under a separate Heads of Agreement arrangement than was established for the other lighthouses.

South Solitary Island suffers a generally harsh climate and very rough seas from time to time. The spray can entirely soak the upper reaches of the Island and the buildings. With the exception of Montague, South Solitary is the only other island location of a NPWS lighthouse.

The island is heavily weed infested and had both goats and rabbits until they were eradicated about 20 years ago. There are now no feral animals of the Island. As a result the ecological importance of the Island is increasing. Most of the Island is now a bird sanctuary and has a strong scientific research focus. It is regarded as an important nesting site for gulls and terns.

The adjacent Birdie Island contains an important colony of Wedge Tailed Shearwaters. Archie Island has little nesting places but is an important resting place for migratory birds.

Given that access to the island is now virtually impossible except by helicopter, on-site vandalism is not considered to be the problem that it was in previous years. Security however must be maintained at an appropriate level.

There are a number of publications that can provide interpretation material. These include a two volume history on Coffs Harbour by Yates, published by Council and a local history of Emerald Beach, by Skinner, which is now out of print. The Local History Library could well have material of value.

In addition there was some good newspaper coverage about the recent return visit made by the wife of the last Keeper (in the mid 1970s). One of the retired Keeper’s family members has copies of 1940s and other Movietone News style footage.

The island has a strong potential to provide an excellent venue for commercial filming or photography, particularly by people accessing the island by helicopter. NPWS need to control the commercial exploitation of this photographic resource, as it does for the other Lighthouses. Access for filming and photography should only be permitted under licence or by special permit, taking into account impact on wildlife.

The nature of the island with its combination of sensitive flora and fauna, erodable soils and exposed climate, gives the place a special set of management issues.

BUILDING CONSERVATION AND RE-USE ISSUES

The biggest issue facing South Solitary is the future of the cottages and out buildings. They contain asbestos roofing and are generally in a neglected state, with some vandalism damage. The asbestos roofing is breaking up in some areas and the gutters have largely collapsed. The buildings are surrounded by vegetation which is also beginning to penetrate the buildings. There is a distinct possibility that without active conservation, even if limited to “mothballing”, the cottages will be reduced to open ruins within the relatively near future.

The cottages, as well as the lighthouse tower, have been assessed as being of primary significance and make an essential contribution to the overall significance of the NPWS Lighthouses collection. They are highly visible from passing cruise and tour craft. Given their significance it is unacceptable to
let the buildings deteriorate to a ruinous condition.

Once the island is transferred to NPWS the Service will have a clear obligation in conservation terms and under the *NSW Heritage Act* as well as its own Charter to conserve and manage the cottages in a responsible manner. It is assumed that AMSA will continue to conserve and maintain the tower into the foreseeable future.

The isolated nature of the offshore island and the virtual impossibility of access by boat, means that the costs of future conservation works will be considerable and involve access by helicopter and/or boat.

A January 1997 report by the NPWS Conservation Architect estimated the cost of several conservation options with regard to the cottages. These were:

<table>
<thead>
<tr>
<th>Option</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Do Nothing&quot;</td>
<td>$37,000</td>
</tr>
<tr>
<td>Emergency Stabilisation</td>
<td>$368,000</td>
</tr>
<tr>
<td>Catch Up Works</td>
<td>$291,000</td>
</tr>
</tbody>
</table>

The Do Nothing option included removing loose asbestos building products and general clean up of the immediate cottage precinct.

The Emergency Stabilisation or "mothballing", included minor repairs to the tower and simple replacement of all roofs, gutters and downpipes, boarding up of windows and doors as well as some corrosion treatment to the gantry.

The Catch Up works included repairs to the tower and considerable repairs to the cottages including joinery, cladding, rising damp, plumbing, internal and external joinery, glazing and internal fittings.

Each of these stages of works included the assumption that the lower order of works was also included in the scope of works. Thus the "Do Nothing" works would be undertaken before the Stabilisation works commenced.

A further estimate for adaption works gave an estimate of $679,000, indicating that to bring the cottages and tower up to a condition where they could be re-used for a new function would cost in the order of $1,374,000.

AMSA typically go onto the Island about 4 times per year and paint the lighthouse tower every ten years. AMSA Brisbane office will have recent maintenance records.

The difficulty of access, potentially harsh conditions and the sensitive nature of the island environment combine to indicate that reasonable re-use of the cottages will be difficult to achieve.

The island has very little capacity to accept change in terms of either future visitor access or new buildings. It has a unique combination of ecological features and is set in an extreme maritime environment. It is essential that the Service establish the Limits of Acceptable Change, particularly in terms of the maximum number of visitors who can be on the island at any one time, if its natural and cultural values are not to be degraded to an unacceptable extent.

The second major issue is the steel gantry. The present gantry is the second elevated structure to be constructed. The footings for the earlier gantry can be seen to the immediate south.

The current structure projects out from the Island and was the only reliable source of resupply and access, given that there is no safe landing point. The gantry is a unique and very evocative structure which most clearly illustrates the sense of isolation of the early lighthouses. It is perhaps the most potent illustrator of this isolation within the whole collective resource of NPWS lighthouses.

Tour boats can get very close to the gantry as the water is quite deep so close to the island at this point. The gantry presents some potential damage to passing craft, requiring the installation of warning signs.

**TOURISM MANAGEMENT ISSUES**

Access is always going to be expensive and unreliable. This must be factored into any potential re-use programme, along with a premium for repair costs, given the deterioration and isolated site. There is also the issue of the strong bird life presence and centipedes which could be disruptive for any island occupants.

Access onto the Island for tourists is currently not available. Access is only by helicopter, at considerable expense and even then the winds can prevent access. The best potential is for a longer term consideration of a special access situation for which guests pay a real premium. This isolation and unique character has its attractions and there is probably a market for this style of operation, if it could be made...
feasible and sustainable. The very nature of the island and its rich flora and fauna resources pose considerable difficulties for visitors. These include sensitive bird breeding areas and programmes, lack of a landing place for visitors, erodability of the soils from excessive foot traffic, sensitivity of plant material to being trampled, extreme weather conditions and the changeability of the weather patterns at very short notice.

In the longer term there is potential to establish the complex as an “executive” style retreat for those groups who are looking for the ultimate adventure experience and are willing to pay any price to achieve it. Such groups could include business people looking for an isolated retreat venue for focus workshops and adventure release, or wealthy tourists looking for the ultimate getaway holiday experience.

The Island can only support such a limited market place given the expense of upgrading the accommodation and infrastructure and the cost of helicopter access. As the other NPWS lighthouses will provide more equitable access and holiday opportunities, there is a reasonable case to be made for supporting such an exclusive use option in this one location.

Coffs Harbour is the largest tourism centre near the Island. Cruise and whale watching boats tend to use a circuit of the Islands as the culmination of a two hour tour. There is one large recreation boat operator, the 80 seat “Spirit of Coffs Harbour” plus another boat. The 80 seat vessel will take on other operations such as dinner cruises to supplement income. A few years ago there was a 100 seat vessel operating out of Coffs, but it went broke. NPWS is looking for interpretation stories for the mainland vantage points and as packages of information for the cruise boats to pass on to their passengers.

Video recording of the place will then allow equity of access to other people who could not afford to purchase the expensive accommodation packages.

Given the high level of local social significance of the lighthouse complex, there is good potential for cross promotion of the resource with other attractions. It is possible to interpret the feel of “what is like to be out there” from a land based observation platform.

The waters around the island are a popular destination for the whale watching and general cruise operators from Coffs Harbour. The region is developing as a major tourism centre on the NSW coast, with most of the new resorts being located along the coastline to the north and south of the town. There is a regular airline service to Sydney.

There are current proposals to establish a Marine Science Centre in the old Quarry near the Harbour at Coffs. It will be a co-operative effort by several universities and the Marine Park Authority. There will be a visitor centre and a field studies centre as part of this complex. The visitor centre could provide a major interpretation outlet for South Solitary, including stories about wrecks and maritime history. The project has reached the point of seeking funding (c.$11m) from State and Federal sources.

CURRENT OR MID TERM PROPOSALS

A structural analysis of the gantry is planned to be conducted in the short term.
4.0
Primary Conservation Policies for the South Solitary Island Lighthouse

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part D of the Conservation Management and Cultural Tourism Plan, the following primary policies establish the essential conservation framework for the South Solitary Island Lighthouse.

- NPWS shall continue to negotiate with the Commonwealth government with the objective of gaining control over South Solitary Island and the Lighthouse complex.

- Once control is achieved, the South Solitary Island Lighthouse shall be retained and managed by NPWS as a key contributing component of the overall NPWS Lighthouse Collection.

- The Conservation Policies and Implementation Guidelines contained in the overall Conservation Management and Cultural Tourism Plan shall be applied, as appropriate, to the South Solitary Island Lighthouse.

- NPWS shall consider gazetting the Island as an Historic Site, in recognition of its complex cultural and natural significance.

- NPWS shall conserve and manage the lighthouse complex as a collection of fine historic buildings and supporting site features that clearly express its original functional role and which has gradually evolved since initial construction in response to progressively developed coastal navigation technology and organisational practices. Recognition and respect for the evolving development of the complex from 1880 until the mid 1970s shall form a key basis for conservation and management of the buildings, technology, artefacts, archaeological sites and infrastructure. Refer to Section 17.1 of the main CM&CTP for the Conservation Principles related to fabric, features and associated artefacts of differing significance.

- Conservation of the South Solitary Island Lighthouse shall protect, respect and where appropriate enhance the identified and closely interrelated characteristics of cultural and natural significance of the place, in its own right and as a component of a larger state, national and international network of late 19th and early 20th century lighthouses.

- The cottages, outbuildings and gantry shall be subject to a “mothballing” process to retard the rate of deterioration of the building fabric within one year of NPWS gaining control of the island.

- All essential and outstanding stabilisation and catch-up repair and fabric conservation works to the buildings and site elements shall be undertaken within a period of five years from NPWS gaining control of the island.

- Adaption of the cottages and outbuildings shall be delayed until a feasible new use is identified and approved.

- The buildings and site elements shall be conserved by the implementation and long term continuation of a cyclical and appropriate maintenance regime, starting as soon as possible. This regime shall seek to maintain the buildings and site elements in the condition reached with the recommended initial stabilisation of the buildings and site elements.

- When the cottage group is adapted to a future new use, the maintenance regime shall be stepped up. This regime shall seek to maintain the buildings and site elements in a character and condition that equates to the time when the complex was an operating lighthouse facility, with a full time staff.

- NPWS shall conserve and manage the immediate island setting as a modified natural landscape with important cultural landscape characteristics that clearly illustrate the development and occupation of the precinct as an operational lighthouse complex, from 1880 until the mid 1970s.

- NPWS shall conserve and manage the wider South Solitary Island group as a modified natural landscape with features that illustrate the layers of human occupation and settlement, but with
respect for the natural characteristics and important wildlife nesting sites.

- NPWS shall conserve and manage the Aboriginal heritage significance of the Island in consultation with the relevant representatives of the local Aboriginal communities.

- NPWS shall conserve and manage the complex and its setting in a manner which communicates and interprets the multi-layered nature of its cultural and natural significance to the general public. Interpretation shall generally achieved by using media and locations that do not require physical access onto the Island.

- NPWS shall facilitate the on-going operation of the lighthouse tower by AMSA as an operational navigation aid, within the framework of a future Heads of Agreement between AMSA and the State of NSW.

- NPWS shall eventually conserve and manage the complex by means of adapting the interiors of the former cottages and support buildings to future new uses which are identified in the site specific Interpretation and Tourism Plans and which are compatible with their evolved architectural and spatial characteristics and cultural significance.

- Future internal adaption of the cottages and support buildings shall support approved uses associated with site management, interpretation and cultural tourism programmes, taking account of the limitations on access imposed by the nature of the Island.

- NPWS shall continue to conserve and manage the Island and the Lighthouse complex in the context of the waters around South Solitary Island being a popular cultural tourism destination and venue for whale watching.

- There shall be no new permanent buildings erected within the immediate Lighthouse precinct. The design and positioning of any future navigational equipment or energy source infrastructure shall be carefully considered to avoid or minimise any adverse impact on the heritage or visual characteristics of the overall lighthouse precinct.

- NPWS shall conserve and manage the South Solitary Island Lighthouse in full recognition of the heritage and environmental management provisions of the relevant aims, objectives, standards and procedures of the Australian Heritage Commission, NSW Heritage Council, NSW EP&A Act, Regional and Local Environmental Plans, the National Trust of Australia (NSW), NPWS and good conservation practice as promoted by Australia ICOMOS.

- NPWS shall co-ordinate the marketing and promotion of interpretation and cultural tourism activities at the South Solitary Island Lighthouse, with the overall NPWS Lighthouses collective resource by reference to the Lighthouses Marketing and Promotions Unit within the Community Relations Division.
5.0 Site Specific Conservation Policy Implementation

In addition to the overall Conservation Policies set out for the NPWS Lighthouses, as a collection, in Part E of the Conservation Management and Cultural Tourism Plan, the following guidelines establish the essential implementation framework for the South Solitary Island Lighthouse.

The Conservation Policy Implementation recommendations are framed in terms of their Short, Medium and Long Term priorities. Short Term indicates that they should be essentially undertaken within one year. Medium Term indicates a completion within one to five years. Long term activities will extend beyond a five year timeframe.

These site specific recommendations are framed in the same categories as the Conservation Policies and Implementation Guidelines of the main Plan, for ease of cross reference.

5.1 Reference to Main CM&CT Plan

SHORT TERM

- Refer to the Conservation Policy and Implementation Sections of the main NPWS Lighthouses Conservation Management and Cultural Tourism Plan. Read all of the following policy implementation recommendations in association with the larger policy framework.

- Participate in the Service wide review and assessment of the CM&CTP.

MEDIUM TERM

- Give special regard to the NPWS management recommendations and other general policies contained in the CM&CTP. In this regard, ensure that close liaison is maintained with all relevant stakeholders, particularly those concerned with heritage management and tourism operations.

- Manage the site in accordance with general NPWS management policies and guidelines.

- Liaise with the Solitary Island Marine Park Authority in accordance with the findings and recommendations of the final CM&CTP.

- Facilitate the co-ordination of the South Solitary Island Lighthouse conservation management and cultural tourism activities with the remainder of the NPWS collective resource. In particular contribute experiences and lessons to the other Lighthouse managers through the Lighthouse Reference Committee.

5.2 Aboriginal Heritage Conservation Policy Implementation

SHORT TERM

- Review the findings of any Aboriginal site surveys and the previously collected knowledge, particularly with regard to the nearby mainland lookout locations.

- Review the current consultation processes with representatives of the Aboriginal community.

- Prepare long term plans for undertaking site surveys on the Island which will enhance the overall understanding of the Aboriginal cultural resources.

MEDIUM TERM

- Undertake additional research and site surveys of the mainland lookout sites to expand the knowledge of Aboriginal cultural resources.

- Refine and expand the consultation process, utilising an MOU or other appropriate mechanism, with the local Aboriginal community. The MOU should also address issues of Aboriginal involvement in planning decisions.

- Maintain active liaison regarding any Native Title issues that may relate to the Island.

LONG TERM

- Continue active consultation with the
Aboriginal community to expand the understanding of their cultural heritage and involvement with the management and cultural tourism programmes at the Lighthouse and the headland generally.

- Undertake additional research and site surveys on the Island to expand the knowledge of Aboriginal cultural resources.

5.3 Landscape Conservation Policy Implementation

SHORT TERM

- Continue to manage the landscape as a modified natural resource.

- Identify and monitor the remnant cultural plantings.

MEDIUM TERM

- Review and prepare an inventory of the important natural and cultural landscape features of the Island, the Lighthouse precinct and the nearby mainland lookout sites, which must be protected into the longer term.

- Prepare a landscape management plan.

- Ensure that appropriate Aboriginal and historical archaeological research is undertaken before any major landscape management programmes are commenced.

- Undertake landscape research and management programmes on a periodic basis.

LONG TERM

- Periodically review the landscape management plan and upgrade as necessary.

5.4 Built Environment Conservation Policy Implementation

SHORT TERM

- Complete negotiations with APG about the initial building stabilisation works which are to be undertaken prior to the handover. This work is to include complete removal of all asbestos roofing, gutters and downpipes to meet Workcover requirements, repair of roof structures and fixing of new colorbond zincalume roofing, flashings, gutters and downpipes to the cottages, outbuildings and jetty shed.

- Complete negotiations with APG about the completion of emergency stabilisation works for the elevated gantry structure prior to the handover.

- During negotiations with APG and AMSA, ensure that AMSA retain responsibility on-going maintenance of the tower and undertake outstanding catch-up works within a one year period of hand over.

- After hand over, commission a detailed structural and condition survey of the gantry to identify the range of minimum stabilisation works that are necessary to retain the potential for long term conservation.

- After hand over, complete works required to “mothball” the cottages and outbuildings, including removal of overgrowth around and inside the cottages and courtyards, clean out dish drains, watercourse drains, culverts and other stormwater disposal systems, clean up and stack loose building materials and install blocking panels into all external window and door openings.

MEDIUM TERM

- Implement a catch-up building works programme on the cottages including external joinery repairs to roofs, verandahs, windows and doors, fence repairs or reconstruction, internal linings, finishes and essential fittings, painting internally and externally.

- Periodically ensure that weed growth around the buildings and yards is not damaging the building fabric or preventing surface water from running away from the buildings.

- Enlist the previously offered assistance by local professionals or trades volunteers to assist in the minimum conservation works to the gantry structure.

- Facilitate the on-going maintenance of the
Lighthouse Tower by AMSA.

LONG TERM

- Ensure that a long term programme of stabilisation and prevention of deterioration is implemented for the cottages and other structures on the Island, particularly if no viable re-use programmes are identified in the early years.

- Possible long term repair and reconstruction of the cottages as special purpose accommodation, in accordance with an approved re-use strategy.

- Ensure that a rigorous long term maintenance plan is implemented for all conserved buildings.

- Repair or replace deteriorated elements of conserved building fabric, generally by replacing like with like.

5.5 Historical Archaeology Policy Implementation

SHORT TERM

- Review known information regarding historical archaeological resources, including those at the nearby lookout and telegraph points.

- Collect copies of relevant historical documentary material that may provide background research in future archaeological assessments.

MEDIUM TERM

- Formulate an archaeological zoning plan for the Island.

- Undertake archaeological assessments of areas with known potential, if development or infrastructure proposals are under consideration.

LONG TERM

- Ensure that any archaeological management activities are undertaken in accordance with the NSW Heritage Act and Service policies.

5.6 Lighthouse Precinct Conservation Policy Implementation

SHORT TERM

- Commence site management programmes.

- Ensure that existing levels of security are maintained

MEDIUM TERM

- Restrict visitor access to the Island, particularly by banning non approved landing from small boats.

- Liaise with AMSA to ensure that any progressive introduction of new navigational technologies into the overall precinct does not negatively impact on the significant characteristics.

LONG TERM

- Avoid the construction of any new buildings on the Island, other than those required and carefully considered for navigational purposes.

5.7 Building Adaption Policy Implementation

SHORT TERM

- No action is required in the short term.

MEDIUM TERM

- Conduct feasibility studies on a periodic basis to identify potential interpretation and cultural tourism operations which might generate the funding and motivation for adapting the cottages and the general precinct, in accordance with the policies and guidelines of the CM&CTP and this Supplementary Information.

- Review the findings and recommendations of any feasibility study with the full range of stakeholders.
- Prepare REFs, submit and gain approval for any new identified direction.

**LONG TERM**

- Undertake building adaptation programme in accordance with approved programme.
- Ensure that any future building adaption programmes respect the architectural nature and spatial arrangements of the particular building.
- Ensure that any future programmes of re-use are undertaken in accordance with the recommendations of the site specific Interpretation Plan.

5.8
Interpretation Planning
Implementation

**SHORT TERM**

- Co-operate in and contribute to the implementation of the NPWS Lighthouses Collective Resource Interpretation Plan.
- Consolidate relevant historical documentary and other material.
- Identify any likely subjects for oral history capture, from both the Aboriginal community and those who were part of the operational phase. In particular continue liaison with the former Lighthouse Keepers who have retired to the Coffs Harbour area and any others known to these people.

**MEDIUM TERM**

- Commission and implement a site specific Interpretation Plan, to be prepared within the framework of the NPWS Lighthouses Collective Resource Interpretation Plan. This plan will initially assume that no reasonable visitor access is available and that all interpretation will need to be done remotely.
- Implement oral history programmes.
- Implement extensive image capture programmes, particularly as this will be the primary form of interpretation available for the vast majority of potentially interested people.
- Determine and implement an interpretive signage programme for the mainland lookout points, which will complement the recommendations of the site specific Interpretation Plan.
- Undertake an active interpretation programme in conjunction with local cruise boat operators and the Local Tourism Information offices.

**LONG TERM**

- In accordance with the Interpretation Plan and any identified re-use programme, install interpretive signage within the precinct.
- Periodically review and upgrade the site specific Interpretation Plan and interpretive activities.

5.9
Cultural Tourism Policy
Implementation

**SHORT TERM**

- Continue to liaise with local cruise boat operators and other interested parties regarding tourism opportunities within the Marine Park that can include the visual appreciation of the island and the Lighthouse.

**MEDIUM TERM**

- Develop and distribute a range of interpretive literature and other media which can be used by the cruise operators when their vessels include South Solitary in their sailing schedules.
- Maintain the policy of limiting any tourism access to the Island to strictly approved programmes or licenced agreements.
- Install signage on the Island to discourage tour boats to sail below the elevated gantry, thereby exposing themselves to risk if it collapses.
- Prepare a site specific tourism plan, which
is formulated in the context of no actual access to the site.

- Periodically review tourism and re-use opportunities and any expressions of interest that may be submitted.

- Establish regular Lighthouse information and familiarisation programmes for the people who staff the Local Tourist Information Office.

- Periodically review and amend operator licences for Lighthouse related organised recreational activities that may take place in the surrounding Marine Park.

LONG TERM

- Monitor cultural tourism programmes.
6.0
Bibliography

6.1 Documentary Sources


6.2 Illustration Sources

In addition to those sources noted on individual photographs, the following sources relate to the identified photographs.

1 *The Story of a Lighthouse, South Solitary*, pp.16

2 *The Story of a Lighthouse, South Solitary*, Cover illustration

3 *From Dusk Till Dawn*, pp80