

5.0 Aboriginal Heritage

The Port Stephens Aboriginal community is represented by the Worimi Local Aboriginal Land Council (LALC), Worimi Traditional Aboriginal Elders and Owners Group (WTAE&OG), Maaiangal Aboriginal Heritage Cooperative, and the Karuah LALC. These groups have a concern and responsibility for the cultural heritage of the Port Stephens foreshore and were consulted regarding the appropriate management of their heritage.

Numerous indigenous heritage sites occur along the Port Stephens foreshore. The majority of previously recorded sites are middens/artefact scatters close to the estuary foreshore and the major creeks that flow into the estuary, including the Karuah River. Scarred trees and rock shelters with deposits and with art have also been recorded. These sites are highly significant to the local Aboriginal community and are protected under the *National Parks and Wildlife Act 1974 (NPW Act 1974)*. Previously recorded sites are registered on the Aboriginal Heritage Information Management System (AHIMS) which is managed by National Parks and Wildlife Service (DECC). A search of this register was undertaken for the current study to identify heritage sites located along the foreshore. These have not been individually mapped due to concerns from the Aboriginal community that making this information publicly available may lead to damage or vandalism. It should also be noted that the Land Councils have chosen not to register some sites for similar reasons.

There is a high likelihood that many more sites exist in addition to those that have been previously recorded. These simply may not have been reported, may not be known about, or may be obscured by soil or vegetation. Landscape reconstruction can provide clues as to where such sites are located. By attempting to establish the character of the pre-European landscape, as well as changes to the landscape during the Holocene and Pleistocene, the resources likely to have been available to Aboriginal people can be identified. This can then provide clues regarding the likely location of specific activities undertaken by Aboriginal people. It can also indicate the type of processes likely to have affected the character and condition of the archaeological record.

The relationship between Aboriginal people and the economic and spiritual resources provided by the land is not restricted to the physical evidence of Aboriginal occupation. Resources that are likely to have been utilised by traditional Aboriginal people (stone, water, food, medicine, shelter) are also considered important, as well as any ceremonial, spiritual and totemic associations that past and contemporary Aboriginal communities had or have to the land. Additionally, there are many locations associated with cultural stories, and places/resources of historical interest to members of the local Aboriginal community.

A detailed study of the tribal affiliations, ceremonial life, and resources utilised by traditional Worimi people is contained in the **Port Stephens Foreshore Reference Document (Aboriginal Heritage)**. The **Reference Document** also provides:

- a discussion about the results of the search of the AHIMS register;
- a review of previous archaeological investigations in the foreshore area;
- a brief analysis of how the landscape of the Port Stephens foreshore has evolved and changed;
- the results of targeted field surveys; and
- information obtained through discussions with the Aboriginal community and NPWS.

All of this information has been used to delineate areas of cultural heritage sensitivity (see **Figure 5.1**). These investigations also identified a number of natural and human induced threats to Aboriginal heritage within the foreshore zone, including foreshore erosion, urban development, and park maintenance activities.

5.1 Native Title Search

A search request was forwarded to the National Native Title Tribunal on 16 June 2006. A search of the Register indicated that there were no entries relevant to the Port Stephens foreshore.

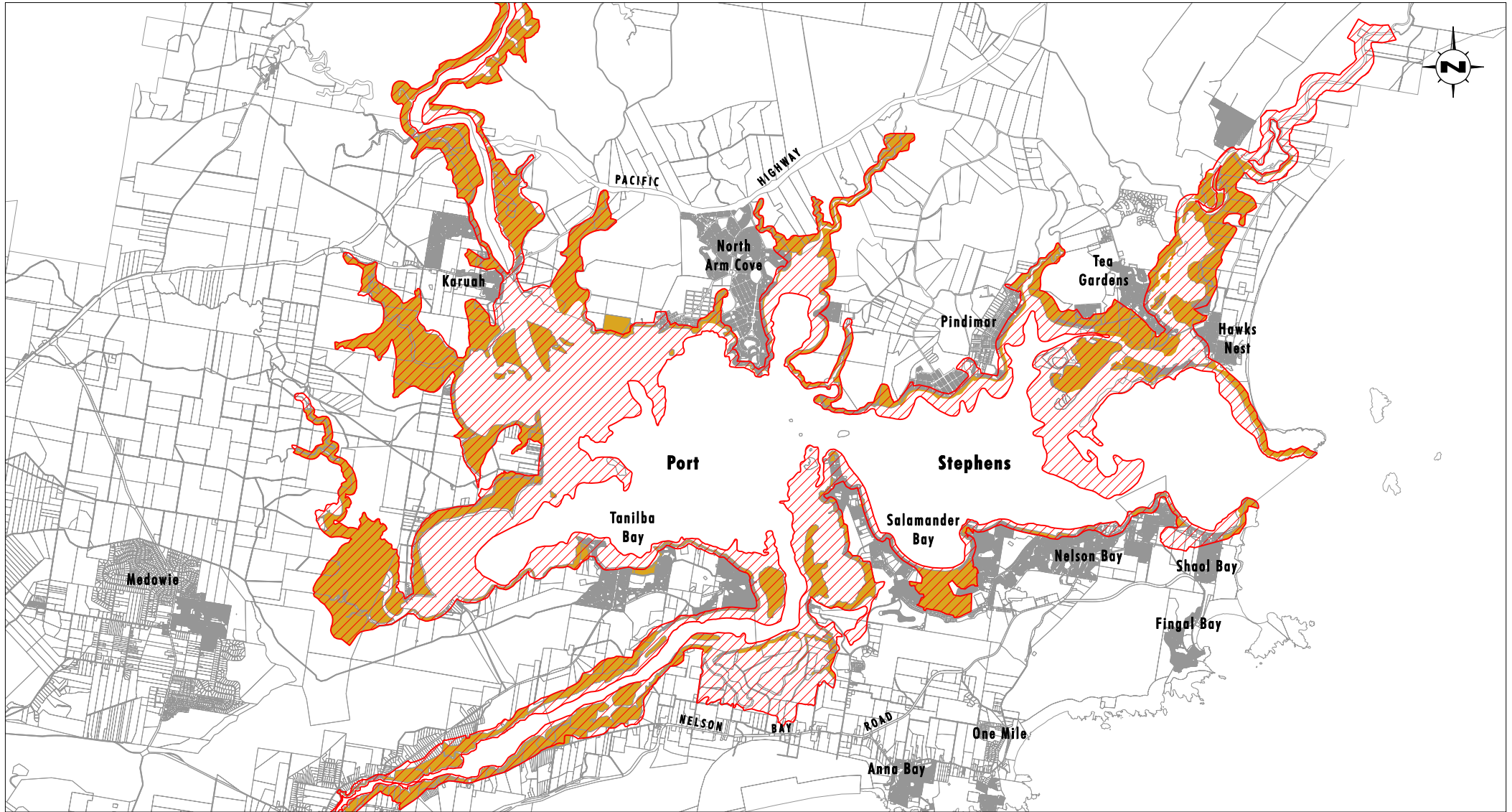
5.2 Aboriginal Land Claims

Worimi LALC currently has a claim under the *Aboriginal Land Rights Act 1983* over the bed of Port Stephens (below the high tide mark). There are a number of locations across the State where the beds of waterways are under Aboriginal land claim. These claims will need to be tested in court and are not likely to be resolved in the short term. Implications for formal approvals within the claim area are therefore currently not known.

5.3 Key Issues

The key considerations with regard to Aboriginal cultural heritage within the foreshore zone are:

- In the past, there has been piecemeal documentation and management of Aboriginal heritage in the absence of a strategic regional management plan(s).
- Numerous Aboriginal sites have been recorded around the foreshore of Port Stephens. These include numerous scarred trees in the Shoal Bay, Little Beach and Bagnalls Beach areas; middens scattered along the entire foreshore but particularly concentrated on the Tilligerry Peninsula and in the Tahlee/Carrington area; artefact scatters and ceremonial sites.
- It is likely that sites other than those registered on the AHIMS database exist. These may be obscured by soil and/or vegetation, may not yet have been discovered, or are known of by the Aboriginal community but choose not to make this information publicly available.
- It is likely that a large proportion of foreshore Aboriginal sites have been destroyed by natural processes and development of the foreshore. Remaining sites provide a limited but important insight into the traditional Aboriginal culture of Port Stephens.
- There are many places (including the entire foreshore itself) which are of significance to the Aboriginal community but which do not necessarily have physical evidence of Aboriginal occupation. These include Tomaree and Yacaaba Headlands, Soldiers Point, Mambo and other wetlands.
- Natural threats to Aboriginal heritage on the foreshore include foreshore erosion, sea level rise, and termite infestation (scarred trees). Such threats are difficult to mitigate against.
- Threats associated with human activity include vegetation clearance and development, maintenance and land care activities undertaken by Council and community groups, and



Source: LPI NSW (2000), Great Lakes Council (2006), Port Stephens Council (2006)
 Note: Seaward study area boundary defined by -2 metre (AHD) contour.

0 2 4 8 km
 1:150 000

Legend

- Study Area
- Areas of Aboriginal Heritage Sensitivity

FIGURE 5.1

Areas of Aboriginal Heritage Sensitivity

vandalism. These threats can be minimised through implementing adequate land assessment procedures and procedures which ensure that relevant people are aware of their responsibilities with regard to Aboriginal heritage.

- Fishing and the resources of the Port Stephens estuary remain extremely important to the contemporary Aboriginal community.

5.4 Current Management

The Port Stephens LEP (Division 3 Heritage Provisions) and the Great Lakes LEP (Special Provisions – Heritage) set out each Councils responsibilities when assessing development applications that affect known or potential Aboriginal sites. Under the heading of *Development of Known or Potential Archaeological Sites*, the Great Lakes LEP states:

- (7) The Council may grant consent to the carrying out of development on an archaeological site that has Aboriginal heritage significance (such as a site that is the location of an Aboriginal place or relic within the meaning of the *National Parks and Wildlife Act 1974*) or a potential archaeological site that is reasonably likely to have Aboriginal heritage significance only if:
 - (a) it has considered an assessment of how the proposed development would affect the conservation of the site and any relic known or reasonably likely to be located at the site prepared in accordance with any guidelines for the time being notified to it by the Director-General of National Parks and Wildlife; and
 - (b) it has notified the Director-General of its intention to do so and taken into consideration any comments received from the Director-General within 28 days after the notice was sent; and
 - (c) it is satisfied that any necessary consent or permission under the *National Parks and Wildlife Act 1974* has been granted.

The Port Stephens LEP has similar provisions but point (c) is not included. Neither LEP sets out how the potential for an Aboriginal site can be established. Both Councils are dependent on the AHIMS database to identify previously recorded sites. This database can be unreliable, and, as mentioned above, may not contain all sites known to the Aboriginal community. Additionally, some sites cannot be defined as one point (as they are on the database) but may extend over a large area of the surface and subsurface.

Some activities which have the potential to affect Aboriginal heritage sites do not require development approval from Council. These activities are consequently undertaken without consideration of the threat posed to previously recorded or potential Aboriginal heritage material. An example of this is maintenance works undertaken by Councils in reserves, or bush rehabilitation and improvement works undertaken by land care and tidy town committees.

5.5 Identified Management Action

Clear identification of those parts of the landscape which have, and have the potential for Aboriginal heritage significance is required. This could be in the form of a regional Aboriginal heritage study(s) that would provide the knowledge base required for a management plan(s) to guide the immediate and long term conservation and management of Aboriginal heritage.

The Department of Planning has prepared an Aboriginal Cultural Landscape Planning Project as part of its Comprehensive Coastal Assessment. The project aimed to record the

Aboriginal community's value and association with the coastal zone; this includes Port Stephens. These cultural values are to be considered in the coastal planning and management decision making process. Maps of the areas and locations of significance in the coastal landscape have been produced, and the information collected will be redistributed to Aboriginal communities for their use during involvement in planning decisions. The project also involved an audit of known cultural heritage sites (focusing on NPWS's AHIMS database) within each coastal LGA. A report (with associated maps) that includes the Port Stephens area will eventually be available (the date of release was unable to be confirmed).

The Aboriginal Cultural Landscape Planning Process, along with the numerous small scale Aboriginal heritage studies undertaken in the foreshore area will provide a solid knowledge base for the production of an Aboriginal Heritage Study and Management Plan for the Great Lakes and Port Stephens regions. Such strategic planning is required to achieve sustainable cultural heritage management on a LGA scale.

With regard to the foreshore, the most immediate requirement is a set of guidelines for the maintenance and management of Council and Crown land. Such guidelines should include a reference to the protection of Aboriginal Heritage. **Appendix 4** details the activities and issues that should be addressed in the *Parks and Reserves Maintenance Guidelines*. Detailed management actions with regard to Aboriginal Heritage are contained in **Section 12.0**.

6.0 European Heritage

An overview of the European history of the Port Stephens region, with particular reference to the foreshore is contained in the **Port Stephens Foreshore Reference Document**. A number of places/buildings within the foreshore zone have been listed on local, state and national heritage registers. These places are listed in the **Reference Document**, the **Foreshore Inventory**, and are shown on **Figure 6.1**.

The sites are associated with various aspects of Port Stephens' history including early European settlement, shipping, and structures and places associated with defence and training during World War II. Important sites include:

- The remains of the World War II fortifications on Tomaree Headland. 'Fort Tomaree is an excellent example of fortification design and construction of this Coastal Defence area' (Register of the National Estate).
- Nelson Head Lighthouse. 'As part of a nationwide network of lifesaving maritime navigational facilities, the Lighthouse, Cottage and Reserve have played a significant role for over 125 years in the development of Australia' (Register of the National Estate).
- The Tahlee House Group. 'An important historical building being the first company residence of the Australian Agricultural Company in Australia, which served as the home of the company's first four superintendents, Dawson, Parry, Dumaresq and King. The building is interesting architecturally and is beautifully sited on the shores of Port Stephens' (Register of the National Estate).

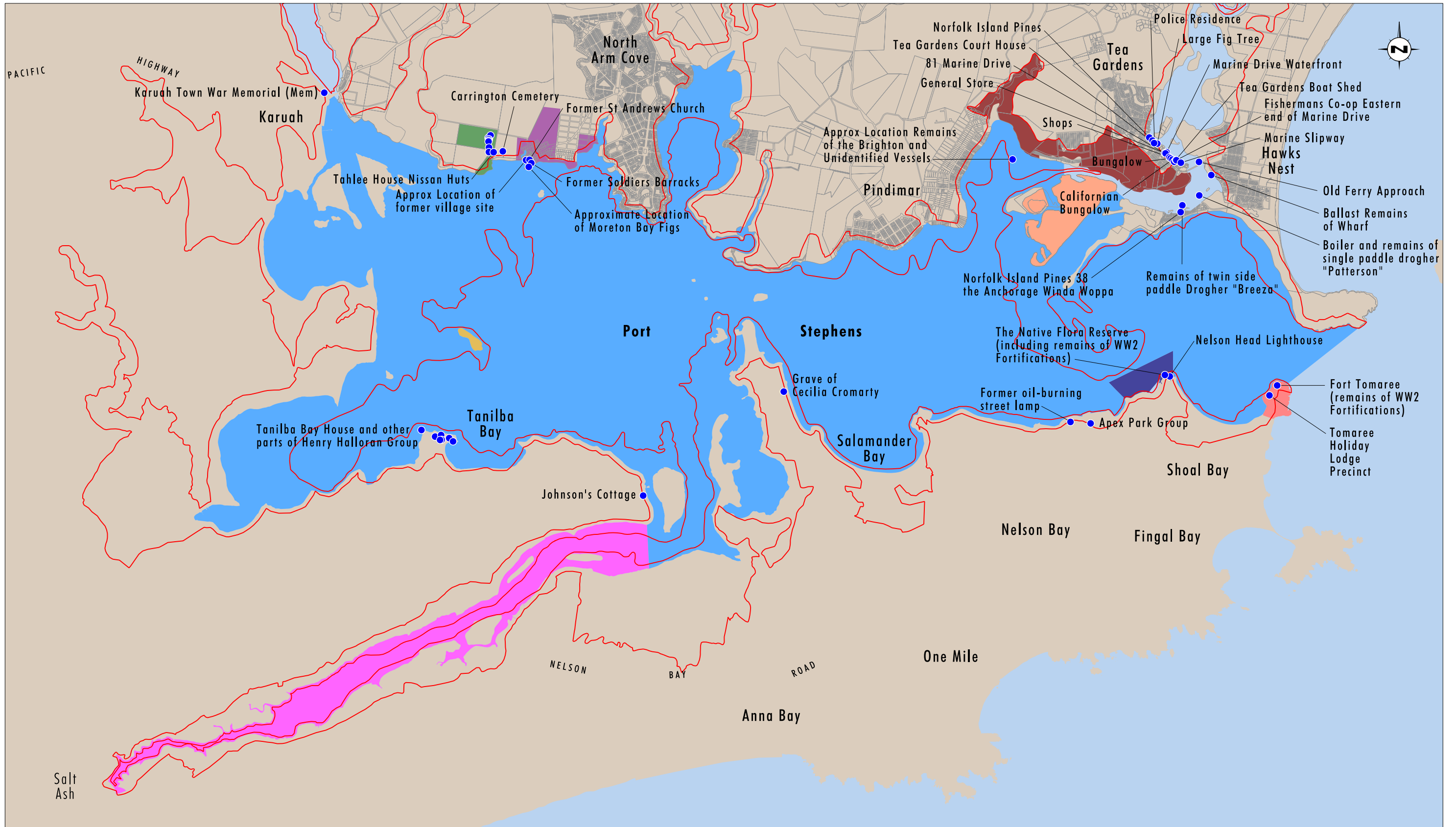
The State Heritage Register and the Register of the National Estate also list places for their scenic and ecological significance. For example, the entire Port Stephens estuary is listed on the Register of the National Estate, as is Corrie Island, Snapper Island and the Fly Point – Halifax Park Aquatic Reserve (although this Reserve has been revoked by the declaration of the Port Stephens – Great Lakes Marine Park). Further detail is contained in the **Reference Document**.

The key considerations with regard to European heritage in the foreshore zone are:

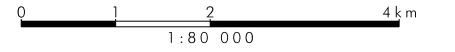
- There has been piecemeal documentation and management of European heritage in the absence of a strategic regional management plan in the Port Stephens LGA.
- The Great Lakes Heritage Study details the historical context of the Great Lakes Council area, identifies items of heritage significance and recommends ways of managing these places and conserving their significance.
- The majority of foreshore heritage sites are located in the Shoal Bay/Nelson Bay (Management Zone A1), Tanilba Bay (Management Zones C1 and C2), Tahlee/Carrington (Management Zone E) and Tea Gardens (Management Zone F3) areas.
- The main threat to heritage items is lack of maintenance.

6.1 Current Management

The Port Stephens LEP (Division 3 Heritage Provisions) and the Great Lakes LEP (Special Provisions – Heritage) set out each Council's responsibilities for the assessment of



Source: LPI NSW (2000), Great Lakes Council (2006), Port Stephens Council (2006)
 Note: Seaward study area boundary defined by -2 metre (AHD) contour.



- Legend**
- Study Area
 - Carrie Island
 - Halifax Park Aquatic Reserve
 - Port Stephens Estuary
 - Proposed Carrington Heritage Conservation Area
 - Tomaree Headland
 - Snapper Island
 - Tahlee House and Grounds
 - Tea Gardens Wetlands
 - Tilligerry Creek
 - Heritage Sites

FIGURE 6.1
European Heritage Sites

development applications that affect European heritage sites. Additionally, both LEPs provide conservation incentives.

As discussed, the Great Lakes Heritage Study investigates the rich history of Port Stephens and the rest of the Great Lakes region. It provides management recommendations for European heritage places in the Great Lakes LGA.

Both the Port Stephens and Great Lakes Councils have Local Heritage Assistance Funds. The aim of these Funds is to encourage positive work on heritage items and to promote greater interest and concern for the conservation of heritage items.

The Port Stephens Historical Society is an active community group which works closely with Council. The Society provided many of the nominations of places now listed on the LEP Heritage Schedule. Its main aim is to study, collect and disseminate historical information about the Port Stephens area.

6.2 Identified Management Action

A strategic regional European heritage management study is required for the Port Stephens LGA. Such a study would incorporate the many important heritage items within the foreshore area.

7.0 Visual Amenity

Both residents and tourists are attracted to the Port Stephens area for its beautiful natural environment. The view across the water to natural bushland in the distance is one that is particularly enjoyed by residents and visitors to the southern shoreline. The northern shoreline and its surrounding ridgelines are generally undeveloped in contrast to the southern shoreline which is fairly intensely developed and populated.

Visual amenity has been divided into two main components for the purposes of this study:

- the visual amenity of the shoreline from the perspective of the water, and from other sections of the foreshore and surrounds; and
- the visual amenity of the immediate foreshore zone.

7.1 Views from the Water and from the Foreshore and Surrounds

Recreational boating is a popular activity for both residents and visitors to Port Stephens. The beauty, peacefulness and naturalness of the waterway are the attributes that create the visual amenity of the area from a boater's perspective. Urban development and the clearance of natural vegetation on the immediate foreshore and surrounding slopes is the main threat to this visual amenity. On the other hand, particular urban settlements around the foreshore, e.g. Nelson Bay and Tea Gardens are attractions of a different type to boaters because they provide shopping facilities and other conveniences. These locations have a 'holiday atmosphere' and are an important part of the character of Port Stephens. Visual amenity from the perspective of boaters on the waterway can be best protected by effective urban planning, including concentrating new development within existing urban areas and minimising development on ridgelines and the immediate foreshore. Appropriate landscaping and vegetative screening of existing foreshore development and surrounds also contributes to visual amenity from the waterway.

Foreshore residents and people looking across the waterway from the southern foreshore in the outer port (between Shoal Bay and Soldiers Point) generally see a spectacular waterway backed by the vegetated slopes and ridgelines of the northern shoreline. There are many public vantage points along the southern shoreline which provide a view of this scene, including Tomaree Head, Nelson Head, West Point and Wanda Head. These are important tourist destinations, and are also popular with residents who incorporate them in their regular walks through foreshore reserves. The excellent visual amenity enjoyed from the southern shoreline is in a large part brought about by the lack of urban development on the northern shoreline (refer to **Plate 7.1**).

Views from the southern foreshore looking east toward the entrance consist of the waterway with its marine life and watercraft, Tomaree and Yacaaba Headlands, and a mix of urban development and natural vegetation. Views to the west also consist of a mix of urban development and natural vegetation (refer to **Plate 7.2**).

Views from the northern shoreline in the outer port are characterised by quite dense urban scenes interspersed among natural slopes and foreshore areas. Development on the southern shoreline, therefore, has a substantial impact on the vista observed by the residents and visitors to the northern foreshore (refer to **Plate 7.3**).

Some urban areas on the northern shoreline, e.g. Pindimar and Lower Pindimar are bordered by a fringe of mangroves. In some cases, local residents have removed an area of mangroves in order to have a view of the waterway. This has often resulted in foreshore



PLATE 7.1
View from Soldiers Point toward the northern shoreline



PLATE 7.2
Looking west across Salamander Bay to Soldiers Point



PLATE 7.3
View from South Pindimar to the southern shoreline



PLATE 7.4
View across the inner port

erosion and the need for foreshore protection structures because the natural barrier to wind and ocean waves has been removed. While people may prefer a water view, it is generally preferable to accommodate the natural vegetation of the area. Additionally, mangroves are legally protected under the *Fisheries Management Act 1994* and heavy fines can be incurred for their removal.

There are only a few vantage points along the northern shoreline that are accessible to the public. These are the public foreshore reserves of South Pindimar, Bundabah, North Arm Cove and Carrington and the Fame Cove section of Myall Lake National Park.

The vista across the inner bays of Port Stephens and along the banks of the estuarine creeks of Tilligerry and Twelve Mile are generally characterised by tidal flats, mangroves and saltmarsh. The leases and sheds of the oyster industry also form part of the character of this area (refer to **Plate 7.4**).

The banks of the Karuah River are also lined by mangroves, as well as natural bushland and rock platforms. Oyster leases and sheds are a common sight along the length of the river. The natural estuarine environment and lack of development form the fundamental contribution to visual amenity in these areas. Vistas are seen from the perspective of boats on the waterway and from the villages of Tanilba Bay, Swan Bay, Tahlee and Carrington.

7.2 Visual Amenity of the Immediate Foreshore

Some of the factors which affect the visual amenity of the immediate foreshore zone are listed below:

- the extent of foreshore reserve and foreshore vegetation;
- the landscaping and facilities within foreshore reserves;
- water quality;
- stormwater outlets;
- foreshore erosion and foreshore structures;
- urban development; and
- signage.

7.2.1 Extent of Public Reserves and Foreshore Vegetation

The majority of the southern shoreline of the outer port and the shoreline of the inner port is lined with public reserve. This varies from a thin strip less than ten metres wide to substantial reserves such as the Bagnalls Beach Reserve and the Stony Ridge Reserve of Soldiers Point. The reserves also vary from cleared and landscaped parkland, e.g. Little Beach Reserve and the Corlette foreshore public reserve, to natural bushland like that of Bagnalls Beach Reserve. The existence of this public foreshore land has meant that foreshore development extends to the water's edge in very few locations and so a green strip runs around the majority of the foreshore. This has resulted in the natural appearance that is so valued by residents and visitors. This asset can be protected through long term planning policies and measures by Council and State Government agencies to ensure that Crown and Community lands are not encroached upon by private development, unless such

development is directly or indirectly contributing to the conservation or public use and enjoyment of the foreshore reserve system

7.2.2 Landscaping and Facilities within Public Reserves

Appropriate landscaping of these foreshore reserves is also important. The planting and care of native trees and shrubs in the riparian zone not only contributes to visual amenity but also protects the foreshore from erosion and provides habitat to native fauna. Additionally, the facilities within foreshore reserves affects visual amenity. Many of the foreshore reserves around Port Stephens contain amenities blocks which are run down, visually obtrusive and of little architectural merit (refer to **Plate 7.5**). As these come to the end of their design lifetime, they should be replaced with less obtrusive facilities, that blend with the surrounding environment.

7.2.3 Water Quality

An important aspect of the visual beauty of the Port Stephens foreshore is a clear and clean waterway. Water quality and amenity in Port Stephens is generally good (see **Section 11**), although could be improved in Nelson Bay Harbour and in the vicinity of some slipways.

The turbidity/clarity of Port Stephens naturally varies between the Inner and Outer Ports. The Inner Port is dominated by fluvial processes and is significantly affected by catchment runoff. Sediments consist of muddy lithic sand that can be resuspended by wind waves and tidal currents. Additionally, flushing times in the Inner Port are up to 10 to 12 days, considerably increasing the potential for algal blooms and poor water quality. The effective management of on-site septic tanks is therefore important (see **Section 11.4**).

The water clarity of the Outer Port is well known. The sandy bottom and rapid flushing time ensure that turbidity is minimal.

7.2.4 Stormwater Outlets

Stormwater outlets are a common blight on the visual amenity of the Port Stephens foreshore (refer to **Plate 7.6**). In some cases, and in certain conditions, they may also create a risk to public safety by creating large channels across the beach (see **Section 8.3**). The stormwater outlets at Shoal Bay are particularly visually obtrusive, especially at times when the beach recedes behind the outlet. The screening of these outlets should be investigated.

Litter and rubbish also tend to accumulate around stormwater outlets following storms. This can be minimised by the installation of gross pollutant traps on all stormwater drains.

Private stormwater drains also affect visual amenity along some sections of the foreshore. For example, drain pipes were noted in front of residences at Wanda Beach and at North Pindimar.

7.2.5 Foreshore Erosion and Foreshore Structures

Foreshore erosion affects the visual amenity of Shoal Bay by creating a steep scarp behind the beach. This is managed through a sand nourishment program, although a recent inspection found that the scarp was substantial and beginning to affect access to the beach. The beach nourishment program should be planned so that the situation does not become severe before action is taken.

In other sections of the foreshore, it is the foreshore protection measures rather than the erosion that impacts visual amenity. For example, locations such as Sandy Point, lower Tilligerry Creek (Lemon Tree Passage) and Pindimar are lined with a random assortment of



PLATE 7.5
Visually obtrusive amenities block at Shoal Bay



PLATE 7.6
Stormwater outlet on Wanda Beach (George Reserve)

seawalls and other forms of foreshore protection which have a detrimental impact on the appearance of the shoreline (refer to **Plates 7.7** and **7.8**). Failed rock revetment which causes rocks and pebbles to accumulate along foreshore beaches is also a problem in some areas, e.g. Kooindah Park foreshore (Lemon Tree Passage), Peace Park foreshore (Tanilba Bay) and the section of foreshore adjacent to Soldiers Point Boat Ramp.

The management of foreshore erosion and foreshore protection structures is discussed in detail in **Section 10.0**.

7.2.6 Urban Development

Urban development which extends to the water's edge (including seawalls) has a detrimental impact on the 'naturalness' of Port Stephens which is so valued by residents and visitors. Building setbacks and appropriate landscaping can reduce this impact (see **Section 10.4.2**). Additionally, seawalls and structures on or below the high water mark should be discouraged and, at the very least, would require full consideration of relevant planning controls and approval from the landowners, being the Department of Lands (see **Section 10.4**). Examples of locations where urban development and waterfront structures have had a negative effect on visual amenity (particularly from the perspective of the water) are North Arm Cove, and Pindimar and Lower Pindimar. **Section 10.5.1** sets out guidelines for more appropriate foreshore structures.

7.2.7 Signage

Many locations along the Port Stephens foreshore have accumulations of signs containing information or regulations regarding a wide range of subjects. The signage is often in poor condition and visually obtrusive (refer to **Plate 7.9**).

EJE Landscape (1995:54, 64) has made recommendations about signage in the Shoal Bay area, the concepts can be applied to the entire foreshore and are discussed below.

It is recommended that a review of signage in the foreshore zone be made with a view to reducing the overall number, improving their design, and locating them in more appropriate positions. The following concepts for replacement signage should be taken into consideration:

- the design of signs should be consistent. Similar colouring, letter styles and materials should be used;
- the wording on each sign should be positive, i.e. seeking people's co-operation rather than imposing a series of restrictions. Informative text should be included to explain the reasoning behind the restrictions;
- there should be a greater emphasis on directional signage that leads people to facilities and/or places of interest;
- materials should be non-corrosive, suitable for a salty environment and graffiti proof;
- signs should be located where there will be minimal interruption to views; and
- the use of local artists should be investigated where interpretive signage is to be installed.



PLATE 7.7
Inappropriate foreshore stabilisation on the lower
Tilligerry Creek (Lemon Tree Passage)

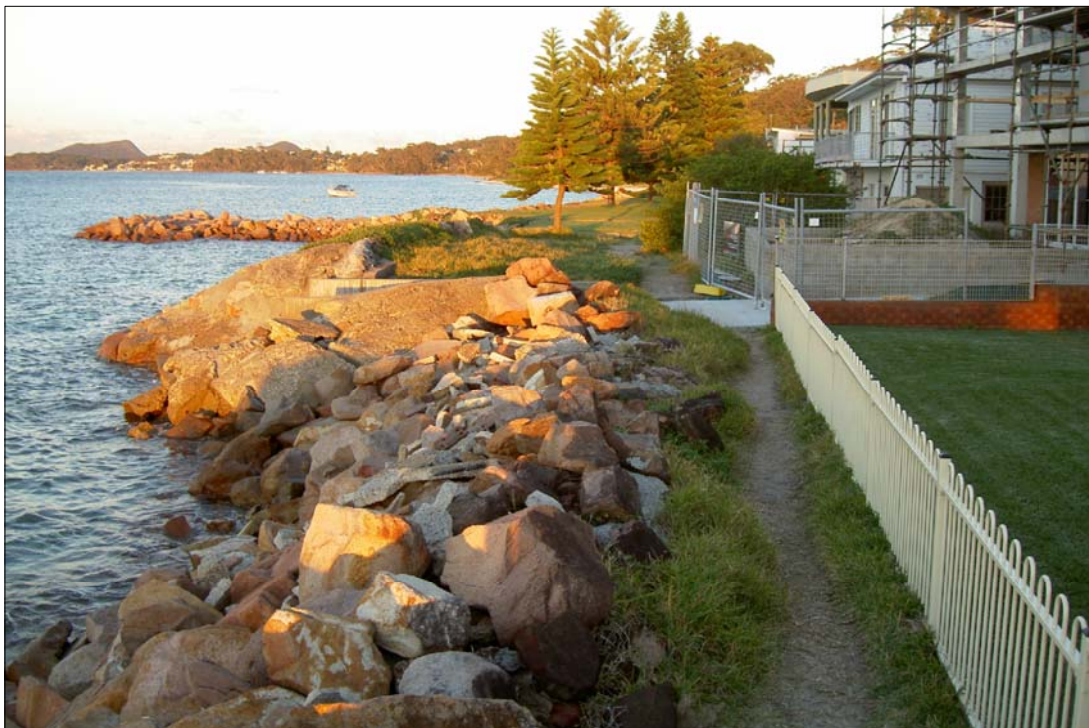


PLATE 7.8
Assortment of seawalls around Sandy Point



PLATE 7.9
Signage in a Soldiers Point reserve. Notice interruption of views

7.3 Current Management and Identified Management Action

The Port Stephens LEP contains a number of objectives and provisions that address visual amenity. For example:

- Provision 44 Appearance of Land and Buildings (Part 3 Special Provisions) states:
The Consent Authority may consent to development of land within view of any waterway or adjacent to any main or arterial road, public reserve or land zoned as open space, only if it takes into consideration the probable aesthetic appearance of the proposed building or work.....
- One of the objectives of Zone 3(a) General Business is to:
Provide for waterfront associated commercial development whilst protecting and enhancing the visual and service amenity of the foreshores.
- One objective of Zone 6(a) General Recreation is to:
Preserve the aesthetics of land which is prominent and visible to the public along foreshore areas
- One objective of Zone 7(a) Environmental Protection is to:
Maintain the visual character of coastal landscapes, hillsclapes and ridgelines and the availability of land for coastal recreation and access.

While these objectives appear to be implemented successfully to a degree, it is the works that are not being undertaken in accordance with LEP or DCP provisions that are most impacting the visual amenity of the foreshore, e.g. rock revetment, signage, and stormwater outlets installed by Council. Additionally, numerous unauthorised seawalls and rock protection works have been installed by residents adjacent to foreshore public reserves. Public education and enforcement of penalties may discourage such installations. **Section 10.5.1** discusses appropriate foreshore protection structures in more detail.

The majority of undeveloped land on the northern shoreline, the appearance of which is so enjoyed from the southern shoreline, is zoned 1(a) Rural Agriculture. While development of this land is constrained to a degree, the zoning makes no reference to visual amenity. As will be discussed in **Section 8.0**, the acquisition of some or all of this land should be considered so that it may be conserved and managed in a way that protects its environmental and visual significance. Contribution by Port Stephens Council should also be considered since the amenity of this side of the port is so dependent upon appropriate management of the shoreline opposite (Great Lakes LGA).

Additionally, the establishment of a Foreshore Environmental Protection Zone or the development of an Estuary Foreshore DCP could provide overriding protection of the foreshore's visual values (see **Section 8.1.1**)

Other management actions with regard to visual amenity have been discussed throughout **Sections 7.1** and **7.2**. These include:

- concentrate new development in existing urban areas and minimise development on ridgelines and the immediate foreshore;
- enforce regulations regarding the removal of mangroves;
- enforce penalties and implement a public education campaign about foreshore erosion and appropriate foreshore structures (see **Section 10.5.4**);
- implement management recommendations regarding water quality (see **Section 11.0**);

- investigate methods of screening stormwater outlets and/or installing alternatives such as artificial wetlands;
- ensure implementation of LEP and DCP provisions that address visual amenity; and
- implement the recommendations made regarding signage in **Section 7.2.7**.

Identified management actions with regard to the visual amenity of the foreshore are contained in **Section 12.0**.

8.0 Foreshore Reserves and Facilities

The majority of the southern and western foreshore of Port Stephens is public land and the majority of the northern shoreline is privately owned. This section concentrates on the management and zoning of public reserves but also examines and provides guidance about the management of private foreshore land.

8.1 Ownership and Management

Public land in NSW falls under the jurisdiction of a variety of government agencies, e.g. Local Councils, the DECC (National Parks and Wildlife Service), Department of Lands, Marine Park Authority, State Forests and the Department of Commerce. Public land on and adjacent to the Port Stephens foreshore includes the following categories:

- Council owned land. This includes Council owned community land, operational land and reserves;
- Crown land is administered through lease, licence, permit and reserve trust arrangements under the *Crown Lands Act 1989*. Relevant examples include commercial leases at Nelson Bay Boat Harbour; commercial leases for oyster depuration; waterfront jetty licences along the Port's foreshore; and Reserve Trust arrangements including Council managed Trusts and community based corporate Trusts such as Tilligerry Habitat, Girl Guides and Scouts. The Crown land around the southern shore of Port Stephens was incorporated into the wider Port Stephens Regional Crown Reserve (RCR) in 2006. Coordinated management of this reserve is undertaken through co-operation between Council and Department of Lands; and through a series of sub plans of management, such as the Nelson Bay Foreshore Plan of Management, Shoal Bay Holiday Park Plan of Management and Halifax Holiday Park Plan of Management. A primary objective of these plans is to facilitate the generation of revenue that can be fed back into foreshore reserve improvements and future maintenance of open space and recreational facilities within the RCR;
- Crown Reserve Trusts managed by Council. Reserve Trusts appointed under the *Crown Lands Act 1989* are charged with the care, control, and management of the reserve for which they are appointed Trustee. Port Stephens and Great Lakes Councils are the appointed Trustees of many foreshore Crown Reserves;
- Crown Reserves with Community Trusts managed by other corporations, e.g. Hunter Water Corporation;
- Defence land (e.g. Twelve Mile Creek); and
- National Parks and Nature Reserves managed by NSW National Parks and Wildlife.

The tenure of public land changes over time. Inquiries on the ownership of public land can be directed to Port Stephens Council. The location of National Park estate can be found at www.environment.nsw.gov.au.

8.1.1 Crown Land Management

The following three sections of the *Crown Lands Act 1989* are relevant to the management of Crown land and guide the Department of Lands in its management and administration of Crown land:

6 Crown land to be dealt with subject to this Act

Crown land shall not be occupied, used, sold, leased, licensed, dedicated or reserved or otherwise dealt with unless the occupation, use, sale, lease, license, reservation or dedication or other dealing is authorised by this act of the *Crown Land (Continued Tenures) Act 1989*.

10 Objects of Act

The objects of this Act are to ensure that Crown land is managed for the benefit of the people of New South Wales and in particular to provide for:

- a) a proper assessment of Crown land;
- b) the management of Crown land having regard to the principles of Crown land management contained in this Act;
- c) the proper development and conservation of Crown land having regard to those principles;
- d) the regulation of the conditions under which Crown land is permitted to be occupied, used, sold, leased, licensed or otherwise dealt with;
- e) the reservation or dedication of crown land for public purposes and the management and use of the reserved or dedicated land; and
- f) the collection, recording and dissemination of information in relation to Crown land.

11 Principles of Crown land management

For the purposes of this Act, the principles of Crown land management are:

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

Crown land is administered through lease, licence, permit and reserve trust arrangements under the *Crown Lands Act 1989*. Relevant examples include commercial leases at Nelson Bay Boat Harbour; commercial leases for oyster depuration; waterfront jetty licences along the Port's foreshore; and Reserve Trust arrangements including council; managed Trusts and community based Corporate Trusts such as Tilligerry Habitat, Girl Guides and Scouts.

Reserve Trusts and Lessees must manage Crown land in a manner consistent with the above principles. Before the Minister makes any decision about Crown land transactions, a Land Assessment is undertaken. Assessments of Crown land at Karuah (foreshore land in the village area) and Carrington have recently been prepared.

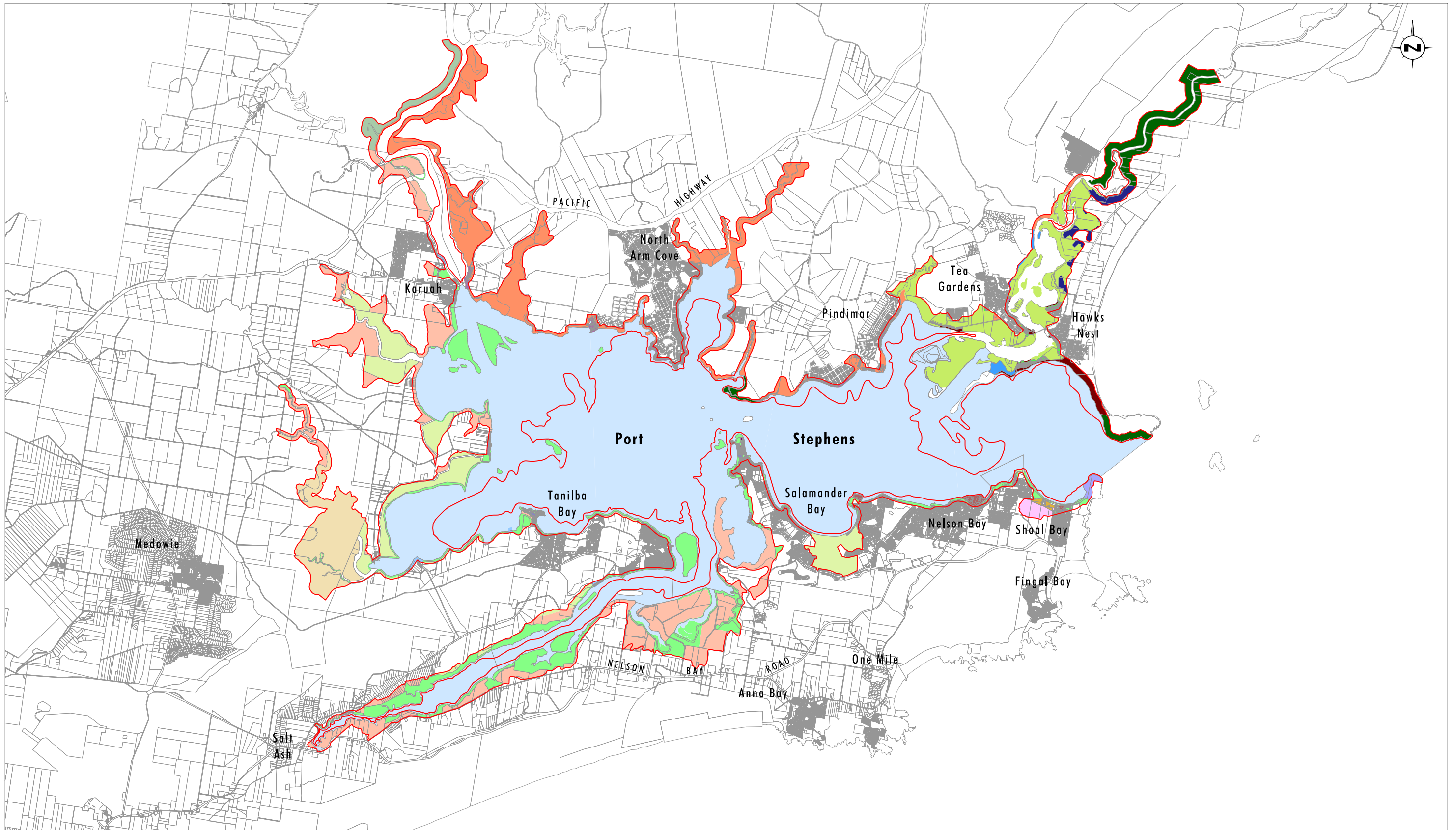
The Crown land around the southern foreshore of Port Stephens was incorporated into the wider Port Stephens Regional Crown Reserve (RCR) in July 2006. Coordinated management of this reserve is undertaken through cooperation between council and Department of Lands; and through a series of sub-plans of management, such as Nelson Bay Foreshore Plan of Management, Shoal Bay Holiday Park Plan of Management, and Halifax Holiday Park Plan of Management. A primary objective of these plans is to facilitate the generation of revenue that can be fed back into foreshore reserve improvements and future maintenance of open space and recreational facilities within the RCR.

Appendix 1 provides an outline of the relevant policies affecting Crown land, while **Appendix 2** provides an outline of the Department of Land's role and direction in managing the Crown Estate.

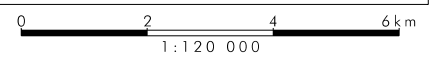
8.1.2 LEP Zoning

The majority of public land along the southern and western shorelines is zoned 6(a) General Recreation and 7(a) Environmental Protection in the Port Stephens LEP, with other minor areas being zoned 2(a) Residential, 3(a) Business General and 4(a) Industrial – General. The limited section of private land is zoned 1(a) Rural Agriculture. These zonings are shown on **Figure 8.1**.

The majority of the privately owned northern shoreline is zoned 1(a) Rural in the Great Lakes LEP. Other foreshore zones include 2 – Village, 7(a) Wetlands and Littoral Forest, and 6(a) Open Space and Recreation. **Table 8.1** summarises the objectives of these zones as well as those which are considered more appropriate for the foreshore area.



Source: LPI NSW (2000), Great Lakes Council, Port Stephens Council
 Note: Seaward study area boundary defined by -2 metre (AHD) contour.



Legend		Great Lakes Council	
 Study Area	 (5a) Defence Purposes	 (6c) Special Recreation "C"	 (1a) Rural Zone
 (1a) Rural Agriculture	 (6a) General Recreation	 (7a) Environment Protection	 (1f) Forestry Zone
 (2a) Residential	 (7f1) Environment Protection (Coastal Lands)	 (4a) Industrial General	 (2) Village Zone
 (2c) Residential "C"	 (7w) Environment Protection (Waterways)	 (3a) General Business Zone	 (6a) Open Spaces and Recreational Zone
 (3a) Business General	 (7c) Environment Protection (Water Catchment)	 (5a) Special Uses Zone	 (7a) Wetlands and Littoral Rainforest Zone
			 (2a) Medium Density Residential Zone
			 (2b) Mixed Residential-Commercial Zone
			 (1c) Future Urban Investigation Zone
			 (8a) National Parks and State Recreation Area Zone

FIGURE 8.1
 Port Stephens Foreshore Zoning

Table 8.1 – Objectives of Existing Foreshore Zoning

Zone	Objective	Location	Local Council
1(a) Rural Agriculture	To maintain the rural character of the area and to promote the efficient and sustainable utilisation of rural land and resources.	Mud Point, southern foreshore of Cromarty Bay	Port Stephens
2(a) Residential	To encourage adequate and ecologically sustainable residential development.	Sections of Tanilba Bay, Swan Bay	Port Stephens
3(a) Business General	To provide for water-front associated commercial development whilst protecting and enhancing the visual and service amenity of the foreshores.	Nelson Bay Harbour area	Port Stephens
4(a) Industrial General	To enable the development of industry with minimal impact on the environment and adjacent areas.	Oyster Cove, Karuah	Port Stephens
5(a) Defence Purposes	To provide for specific defence force and associated uses of land in appropriate locations.	Sections of Twelve Mile Creek	Port Stephens
6(a) General Recreation	To provide land for active and passive recreation.	Majority of southern and western foreshore	Port Stephens
7(a) Environmental Protection 'A'	To encourage the conservation and proper management of environmentally sensitive land.	Nelson Head, Mambo Wetland	Port Stephens
7(f1) Environmental Protection 'F1' (Coastal Lands)	To identify and protect coastal lands which are recognised as being environmentally sensitive; to safeguard sections of the coast which are significant tourist and recreational areas and to promote only environmentally and aesthetically sympathetic development.	Tomaree Headland	Port Stephens
1(a) Rural	To restrict development to those uses which are unlikely to: reduce agricultural potential, generate unreasonable demands on public services and infrastructure, or have an adverse impact on water resources.	Majority of northern foreshore	Great Lakes
2 Village	To restrict development to small scale developments that does not impact on the character of residential village areas.	Carrington, North Arm Cove, Bundabah, Pindimar, and Lower Pindimar	Great Lakes
6(a) Open Space and Recreation	To restrict development for the purposes of leisure and recreation.	Tea Gardens, Winda Woppa	Great Lakes
7(a) Wetlands and Littoral Forest	To restrict development to that which is compatible with the existing special ecological or scientific values.	Tea Gardens area (foreshore north of Corrie Island)	Great Lakes

Table 8.1 – Objectives of Existing Foreshore Zoning (cont)

Zone	Objective	Location	Local Council
7(f1) Coastal Lands Protection	To restrict development to cases in which it is compatible with land possessing special environmental or recreational values and only cases in which the development can be carried out in a manner that does not detract from the scenic quality of such land.	Does not currently apply to any estuary foreshore area	Great Lakes
7(f2) Coastal Lands Acquisition	To restrict development to cases in which it is compatible with land possessing special environmental or recreational values, and only in cases which: will not detract from the scenic quality of the land or prejudice proposals for the acquisition of the land.	Does not currently apply to any estuary foreshore area	Great Lakes

As **Table 8.1** indicates, the objective of the most common foreshore zone along the southern and western foreshore (6(a) General Recreation) is provision of public recreation with no reference to conserving the unique values and uses of the foreshore. Conversely, those areas which are zoned to protect environmental values do not take the special recreational values of the foreshore into consideration. The objective of the most common zoning along the northern foreshore is the protection of agricultural sustainability, again there is no reference to the conservation, scenic, or potential recreational value of the area.

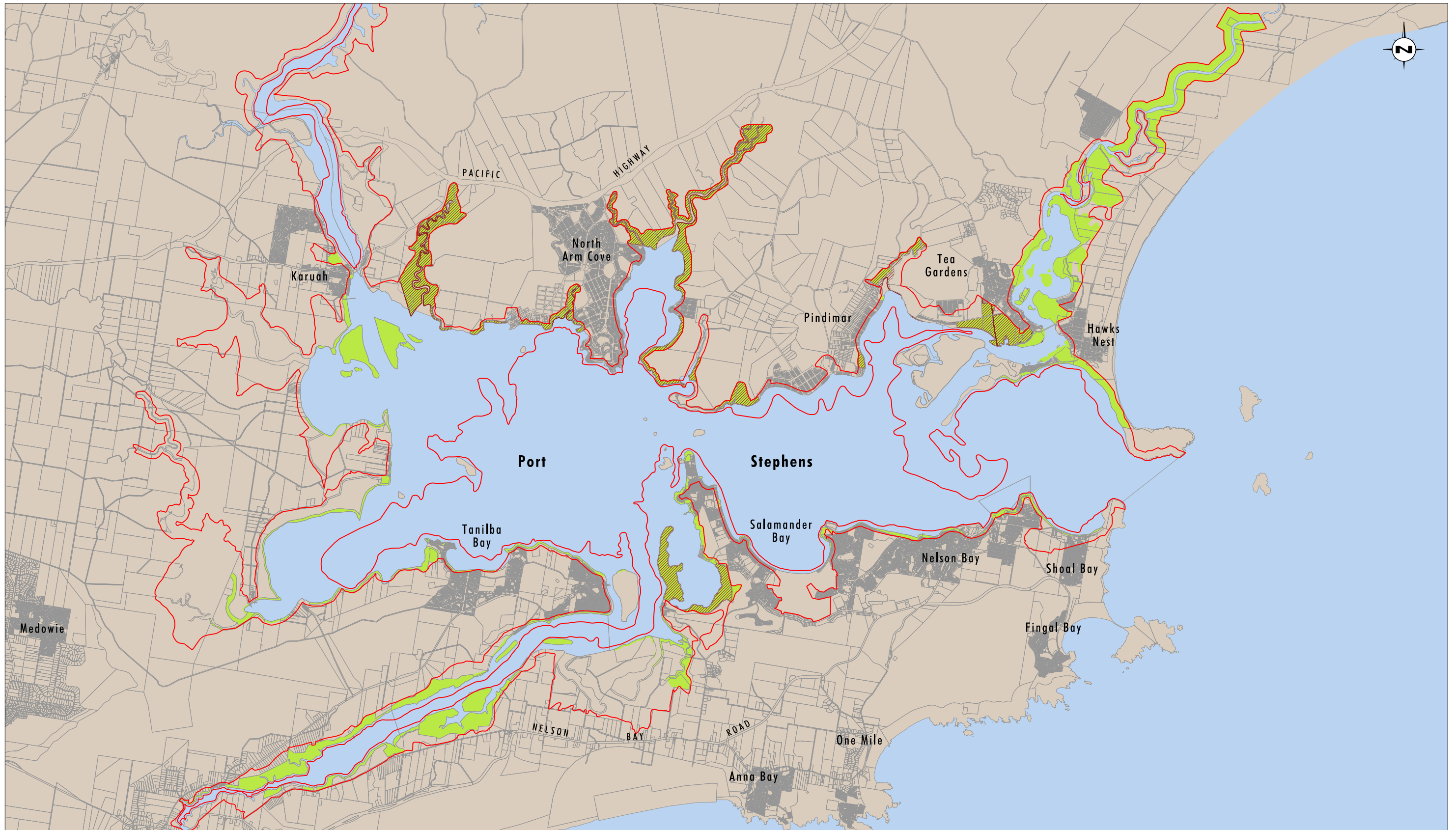
In recognition of the recreational and conservation value of the estuary foreshore, and of its role as the interface between a highly significant marine habitat (now declared a Marine Park) and an intensively utilised hinterland, it is considered that specific sections of the foreshore be rezoned to Environment Protection (e.g. 7(f1) Environment Protection (Coastal Lands) in the Port Stephens LGA, or 7(f1) Coastal Lands Protection in the Great Lakes LGA, or equivalent in Standard LEP (Department of Planning 2006)). Alternatively, an Estuary Foreshore DCP could be developed for each of the LGAs (these would need to be consistent with each other to be effective). Indicative areas that could be rezoned or included in a foreshore specific DCP are shown on **Figure 8.2**. These areas have been determined based on the following criteria:

- existing boundaries of 6(a) and 7(a) zones;
- extent of important ecological habitats and areas of cultural heritage significance; and
- areas which contribute to the visual amenity of Port Stephens.

Establishment of a foreshore environment protection zone/DCP would allow the management of the estuary foreshore as a contiguous land use unit and provide recognition of the extremely important ecological and scenic values, as well as its recreational and social values. It would provide the opportunity to develop a unified and interrelated set of planning requirements and guidelines that address the needs of the estuary shoreline in both the local and regional context. A Foreshore Protection Zone or DCP would also be consistent with the objectives of the adjacent Marine Park.

Details, objectives and extent of the rezoning/DCP will need to be determined by Port Stephens and Great Lakes Councils with close consultation with relevant State agencies. However, it is suggested that the objectives of the foreshore environmental protection zone could include:

- to identify and protect coastal lands which are recognised as being environmentally sensitive;
- to safeguard sections of the foreshore which are significant tourist and recreational areas and to promote commercial development in appropriate areas that is environmentally and aesthetically sympathetic;
- to regulate development so that it does not adversely affect and is not adversely affected by coastal processes, in both the short and long term;
- to reserve privately owned land that is essential for future public open space/protection and enhancement of the natural environment;
- to allow development on foreshores where that development is water related and enhances the recreational use of natural environment of the foreshore;
- to protect Aboriginal cultural heritage in foreshore areas;



Source: LPI NSW (2000), Great Lakes Council (2006), Port Stephens Council (2006)
 Note: Seaward study area boundary defined by -2 metre (AHD) contour.

0 1.0 2.5 5.0 km
 1:100 000

Legend

- Study Area
- Consider Acquisition
- Consider Rezoning/DCP

FIGURE 8.2

Areas suggested for Rezoning/
 DCP and Acquisition

- to regulate development to avoid inappropriate uses of land, being uses which would destroy or damage a habitat ecosystem (particularly that of wetlands), significant vegetation or wildlife; and
- to preserve the aesthetics of land which is prominent and visible to the public along foreshore areas.

The additions and amendments include particular objectives of the 6(a), 7(a) and 7(f1) zonings (Port Stephens LEP) and combine them to produce objectives which are specific to the foreshore. The zoning/DCP would allow management of the assets and threats that have been identified throughout this Plan, including:

- safe and easy access to the waterway;
- access for pedestrians and cyclists along the length of the foreshore (e.g. a formal shoreline walk);
- foreshore erosion wave run-up/flooding and foreshore structures;
- a consistent signage system;
- planning and location of waterway access facilities and facilities for boaters;
- distribution of reserve and facilities usage;
- riparian and aquatic vegetation protection and rehabilitation;
- protection of visual amenity;
- protection and management of cultural heritage values; and
- appropriate commercial development of some public land which will allow investment into the management and conservation of other areas.

Additionally, it would allow Councils, government agencies and community groups to seek grants in a focused and streamlined manner.

The areas which are considered suitable for rezoning or controlled by a foreshore DCP are discussed further in **Sections 8.1.3 to 8.1.5**.

8.1.3 Port Stephens-Great Lakes Marine Park

The Port Stephens – Great Lakes Marine Park was declared in December 2005. The Marine Park zoning acts in an equivalent way to LEP zoning (and overrides LEP zoning). Whilst only a very narrow strip of the Marine Park zoning overlaps with the current study area (the section which extends seaward of the high water mark), the Marine Park is a significant component of the project area and it shares an extensive boundary with the foreshore.

Under the *Marine Parks Act 1997* (s.20) determining authorities must consider certain matters before determining development applications for the carrying out of development on land that is in the locality of marine park or aquatic reserve.

In particular, consent and determining authorities must take into consideration:

- the objects of the *Marine Parks Act 1997* (for developments within the locality of the marine park);
- the permissible uses of the marine park or aquatic reserve; and
- any advice provided by the MPA about the impacts on the particular reserve of the development in the locality.

In addition, if the consent authority is of the opinion that the development proposed is likely to have an effect on the plants or animals within the marine park and their habitat, the consent authority must consult with the MPA before finally determining the application.

However, when the proposed development is located within the marine park, concurrence of the MPA must first be obtained prior to the issue of any development application.

The following sections include discussion about the Marine Park zoning and its influence on the management and types of activities undertaken on the foreshore.

8.1.4 Land Acquisition

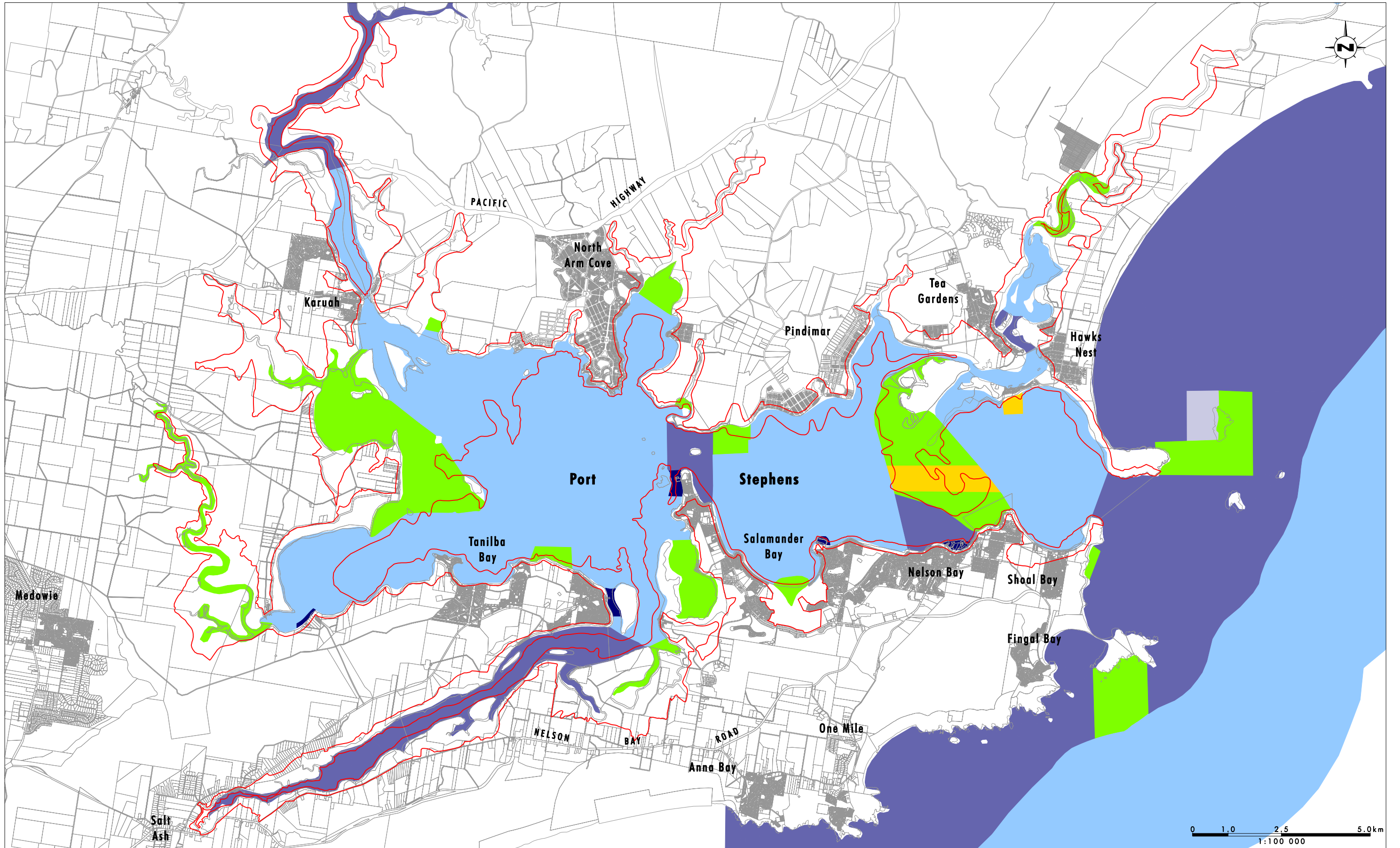
Management of the recreational, social, ecological, economic and visual values of the Port Stephens foreshore is more straightforward on public land because the land use objectives and controls for the protection of these values are already in place. Land use controls on private land are more difficult to implement and enforce, and often require complex legislative changes. For this reason, foreshore areas which are currently privately owned but contain values that require long term conservation for the benefit of Port Stephens as a whole, should be considered for government acquisition. These areas are identified in **Sections 8.1.4 to 8.1.5** and shown on **Figure 8.2**.

8.1.5 Southern Foreshore – Shoal Bay to Soldiers Point (Management Zones A1, A2, A3 and B1)

The southern foreshore is almost entirely lined by Council owned reserves and Crown Reserve, varying from substantial bushland reserves (e.g. Anzac Park, Bagnalls Beach Reserve and Stoney Ridge Reserve); to grassed and landscaped parkland (e.g. Fly Point Park, Corlette Park, Pearson Park and Kooindah Park); to narrow grassed strips between the shoreline and private residences (e.g. Sandy Point, western Salamander Bay, and the eastern shoreline of Soldiers Point). The most substantial area of privately owned land encompasses Mud Point and the southern margin of Cromartys Bay.

The majority of public land along this shoreline is zoned 6(a) General Recreation, although some sections are zoned 7(a) Environment Protection (e.g. a section of Nelson Head and Mambo Wetland) (see **Figure 8.1**). Tomaree Headland, part of Tomaree National Park is zoned 7(f1) Environment Protection (Coastal Lands), and the Nelson Bay Harbour area, which is Crown Reserve, is zoned 3(a) Business General. The privately owned section of the shoreline (Mud Point and southern Cromartys Bay) is zoned 1(a) Rural Agriculture. The Port Stephens waterway is within Port Stephens LGA and is zoned 7(w) Environment Protection (Waterways). This zoning extends seaward of the mean high water mark.

The Marine Park zoning shows a large proportion of the southern foreshore (below high water mark) as being incorporated within a General Use Zone (see **Figure 8.3**). This will have no significant impact on the current use of this area, nor the recommendations made in the current Plan. Other areas have been defined as Sanctuary Zones, Habitat Protection Zones and Special Purpose Zones.



Source: LPI NSW (2000), Great Lakes Council (2006), Port Stephens Council (2006), Marine Parks Authority (2007)
 Note: Seaward study area boundary defined by -2 metre (AHD) contour.

Legend

- Study Area
- General Use
- Habitat Protection Zone
- Habitat Protection Zone (Fishing for Bait Only)
- Sanctuary Zone
- Sanctuary Zone (Dolphin Protection Area - speed limits apply)
- Special Purpose Zone

FIGURE 8.3

Port Stephens - Great Lakes
Marine Park Zoning

A Sanctuary Zone has been defined between Nelson Head and Fly Point (extending across the water to Corrie Island). This zone excludes the Little Beach area which is defined as a Habitat Protection Zone. Recreational fishing is not permitted in the Sanctuary Zone and only line fishing is permitted in the Little Beach Habitat Protection Zone. The existing waterway access facilities at Little Beach are located within the Habitat Protection Zone and will be maintained as per the existing maintenance process. Expansion of the Little Beach Boat Ramp (a desire expressed by some members of the community) is unlikely to be approved. This was also the case prior to the declaration of the Marine Park due to its location within the Fly Point – Halifax Point Aquatic Reserve (which has since been revoked in accordance with the *Marine Parks Act 1997*). Not only would an expansion of facilities at Little Beach have an impact on the aquatic ecology, more intensive usage of an area that is surrounded by Sanctuary and Habitat Zones is not consistent with the objectives of such zoning.

Cromartys Bay has also been identified as a Sanctuary Zone in the Marine Park. It is understood that the declaration of the Marine Park has no affect on existing aquaculture leases. The surrounding foreshore supports ecologically significant SEPP14 wetlands (see **Section 4.1.8**). The current Plan recommends this area be considered for acquisition and rezoning, or that it become the subject of a specific foreshore DCP. Like the adjacent waterbody, a high level of protection is considered necessary. This is considered further in **Section 8.12.1**.

The northern and north-eastern shoreline of Soldiers Point (north of Kangaroo Point) has been included within a Habitat Protection Zone, with the area between the Soldiers Point Boat Ramp and Marina being incorporated into a Special Purpose Zone. Again, such zoning would have no substantial ramifications for the activities and management of the foreshore. The existing assessment process for the installation and maintenance of infrastructure in this zone will continue, however, concurrence will be required from the MPA for development consent. Accordingly, any new infrastructure will need to be consistent with the *Marine Parks Act 1997* and the associated zoning.

Nelson Bay Harbour and the Anchorage Marina at Corlette have also been incorporated into Special Purpose Zones and so can continue existing operations. Any expansions or changes to these facilities would require concurrence from the MPA and be in accordance with the objectives of this zone.

The public ownership of the majority of the southern foreshore makes its long term management relatively straightforward. However, its important recreational and conservation values could be more effectively managed through a zoning/DCP which recognises its unique combination of values that are specific to the foreshore. It is therefore proposed that the majority of this foreshore be rezoned to Environment Protection or become the subject of an Estuary Foreshore DCP (see **Figure 8.2**).

Acquisition of the privately owned Mud Point and foreshore of Cromartys Bay should also be considered. Concurrently, the area should be rezoned to Environmental Protection or be the subject of an Estuary Foreshore DCP (see **Figure 8.2**).

8.1.6 Inner Port Foreshore (Management Zones B2, B3, C1, C2, C3)

Large sections of the inner port shoreline and the shoreline of Tilligerry Creek are located within the Worimi Nature Reserve; or was formerly Crown land managed by the Department of Lands or lessees (oyster operations). Land transfers from the National Park Estate (*Lower Hunter Region Reservation*) Act 2006 have resulted in significant areas going from Crown land to DECC estate in these areas.

The majority of this land is zoned 6(a) General Recreation (including Swan and Wurrung Islands, and Snapper Island) (see **Figure 8.1**). Landward of the shoreline, Nature Reserve areas are zoned 7(a) Environment Protection. Limited sections of the foreshore are also zoned 4(a) Industrial General (Oyster Cove) and 1(a) Rural Agriculture (sections of Little Swan Bay).

It is considered that an Environmental Protection zoning or a DCP would be more suitable for Swan, Wurrung and Snapper Islands. Such a zoning/DCP would be consistent with the objectives of the Nature Reserves (of which they are a part) (see **Figure 8.3**).

The majority of the foreshore of Twelve Mile Creek is located within the Salt Ash Air Weapons Range and is zoned 5(a) Special Uses – Defence. The upper catchment of the creek is zoned 1(a) Rural Agriculture, and a section of the lower part of the creek (eastern bank) is zoned 7(a) Environment Protection. This section falls within the Worimi Nature Reserve.

The southern foreshore of Reedy Creek falls within the Worimi Nature Reserve and is zoned 7(a) Environment Protection. The northern foreshore of the creek is privately owned and is also zoned 7(a) Environment Protection. A VCA or similar between these owners and DECC would assist in the conservation and protection of the foreshore vegetation in this area (see **Sections 4.4** and **4.5.5.1**).

The reserves which encircle the Tilligerry Peninsula (Lemon Tree Passage to Tanilba Bay) are mainly Crown land that is managed by Council and a rezoning from 6(a) General Recreation to Environment Protection, or the development of a DCP would take its important role in the conservation of koala habitat into consideration.

The majority of the Tilligerry Creek foreshore was formerly Crown land, zoned 6(a) General Recreation. In accordance with the National Park Estate (*Lower Hunter Region Reservations*) Act 2006, large areas of this Crown land have now been transferred to DECC. This foreshore supports important ecological habitat, all of which is adjacent to either an identified Sanctuary Zone or Habitat Protection Zone (see **Figure 8.3**). An Environmental Protection zoning/DCP is considered more appropriate for these areas. The upper sections of Tilligerry Creek are privately owned and zoned 1(a) Rural Agriculture.

Small sections of private land extend along the shoreline of Swan Bay village, along the southern and western margins of Little Swan Bay, and around the western headland of Tanilba Bay (sections of Sunrise Point, Wundabalaynbah Point, Bato Bato Point and Tanilba Point). These are zoned 2(a) Residential (see **Figure 8.1**).

A large proportion of the Inner Port and its foreshore (the section of the study area 20 metres seaward of mean high tide) has been identified as a Sanctuary Zone within the Marine Park. These sections include Mallabula Point, Fenningham's Island Creek, Little Swan Bay (including Reedy Creek) and an area to the south and north of the bay, and the lower section of Twelve Mile Creek (see **Figure 8.1**).

The remaining sections of the waterway (Big Swan Bay and Tanilba Bay) have been incorporated into the General Use Zone of the Marine Park. This has no substantial bearing on the current use or management of the foreshore.

It is considered that the rezoning of all foreshore areas shown on **Figure 8.2** to Environmental Protection or an Estuary Foreshore DCP would contribute to the protection of both recreational and conservation values. Such a rezoning/DCP would also be consistent with the objectives of the Marine Park.

8.1.7 Northern Foreshore and the Karuah River (Management Zones D, E, F1, F2 and F3)

The northern shoreline of Port Stephens is largely privately owned and zoned 1(a) Rural Agriculture (see **Figure 8.1**). A significant component of the foreshore of the Karuah River is also privately owned and zoned 1(a) Rural Agriculture, although the Karuah Nature Reserve encompasses a large section of the upper western foreshore. There are also substantial parcels of Crown land (controlled by Council, the Department of Lands and lessees (oyster operations)).

Small public reserves are located on the foreshore within many of the small villages on the northern shoreline. The reserves are zoned 2 Village, consistent with the surrounding residential area (see **Figure 8.1**).

Two small sections of the northern shoreline form part of Myall Lakes National Park – Fame Point and Yacaaba Headland. These areas are zoned 8(a) National Parks and State Recreation Area. Corrie Island is a Nature Reserve zoned 7(a) Wetlands and Littoral Rainforest.

The majority of the foreshore in the Tea Gardens, and Myall Lakes/Lower Myall River area is Council or Crown land that is zoned 7(a) Wetlands and Littoral Rainforest, although the Jimmys Beach, Winda Woppa and Tea Gardens foreshores are zoned 6(a) Open Space and Recreation. It is considered that an Environmental Protection zoning would be more appropriate than the 6(a) and 7(a) zoning (see **Figure 8.2**).

The Marine Park zoning identifies the following areas as Sanctuary Zones: the upper section of the Karuah River, Number One Cove, the northern section of North Arm Cove, Fame Cove, the Corrie Island area (extending across the port to Fly Point and Nelson Head), and a small area off Winda Woppa (see **Figure 8.3**). The area off Winda Woppa is identified as a Dolphin Protection Area, and speed limits apply. The narrow section of the port to the north of Soldiers Point is also important for the movement of dolphins between the Inner and Outer Ports.

Acquisition of the following sections of the foreshore should be considered concurrently with a rezoning or development of an Estuary Foreshore DCP:

- the foreshore of Number One Cove and the section of Yalimbah Creek within the foreshore zone;
- the northern and eastern foreshore of North Arm Cove and the section of Bundabah Creek within the foreshore zone;
- the foreshore of Fame Cove (that section which is outside existing National Park);
- the foreshore between Myall Lakes National Park (Fame Point) and Lower Pindimar; and
- the foreshore of the northern section of Wobbegong Bay and the section of Kore Kore Creek within the foreshore zone.

These areas contain relatively undisturbed habitat, are a major component of the visual amenity of the Port from the perspective of the southern shoreline (see **Section 7.1**) and would provide public access to an otherwise inaccessible foreshore. Additionally, an Environment Protection zoning or Estuary Foreshore DCP would be consistent with the objectives of the adjacent Marine Park.

The Karuah River upstream of the town of Karuah has been identified as a Habitat Protection Zone (see **Figure 8.3**). The area adjacent to Fame Point (extending to Soldiers Point) has also been identified as a Habitat Protection Zone. Any Crown land adjacent to the Karuah River that becomes available should be rezoned to Environment Protection or be the subject of an Estuary Foreshore DCP. This should not rule out limited environmentally sympathetic commercial development.

8.2 Facilities within Reserves

The majority of foreshore reserves on the southern shoreline contain the following facilities: an amenities block, picnic tables, barbecue facilities, a playground, and a car park. The facilities contained in each individual foreshore reserve, along with their condition, adequacy, and appropriate management recommendations are detailed in **Sections 12.0** and in the **Foreshore Inventory**.

The planning and maintenance of facilities within the southern and inner foreshore reserves is incorporated into Port Stephens Council's *Forward Works Program*. A review undertaken as part of this Plan indicates that the planning of new facilities and maintenance of existing facilities in foreshore reserves is adequately addressed through this Program. A similar program for the northern foreshore does not exist.

8.3 Public Accessibility

The majority of the southern and inner foreshore of Port Stephens is accessible to the public due to the extent of public land. However, as discussed in **Section 8.1.1**, the width of foreshore public land varies dramatically. In sections of the foreshore where the width of public land is very restricted, public access is often discouraged by the 'private' appearance of the area. Additionally, in some locations, private structures extend across the public reserve and inhibit access. Sections of the foreshore where public access is passively discouraged and/or inhibited are:

- Sandy Point (numerous private foreshore structures inhibit access);
- the western foreshore of Salamander Bay ('private' appearance and a number of foreshore structures that inhibit access);
- the eastern foreshore of Soldiers Point (north of Kangaroo Point) ('private' appearance created by a continuous line of seawalls);
- the northern section of Sunset Beach (western foreshore of Soldiers Point) ('private' appearance created by a continuous line of seawalls); and
- Sunrise Point, Tanilba Bay ('private appearance').

These locations are shown on **Figure 8.4**.

Public access can also be hindered at certain times by particular stormwater drains. For example, a substantial channel can be created across Wanda Beach from the stormwater outlet in George Reserve following a large storm. This hinders access along the beach and may cause a person to slip and fall down the relatively high and steep channel banks.



Source: Port Stephens Council
Note: Seaward study area boundary defined by -2 metre (AHD) contour.

0 1.0 2.0 2.5 km
1:50 000

- Legend**
- Study Area
 - Discouraged Access
 - Inhibited Access

FIGURE 8.4
**Locations where Access is Discouraged/
Restricted on Public Land**

The channels created by stormwater outlets across beaches during large storm events should be monitored and managed. Warning signs may need to be erected if tidal processes do not remove the channels within 24 to 48 hours.

The port's northern shoreline and the banks of the Karuah River are substantially privately owned and so are inaccessible to the public. The major exceptions along the northern shoreline are reserves at Tea Gardens, Winda Woppa and the Yacaaba Headland and peninsula. These reserves, along with the small village reserves and sections of National Park along this shoreline, are therefore very important from a recreational point of view because they are the only means by which the public can access and enjoy the foreshore and waterway from the northern side of the port.

8.4 Level of Usage

The level of usage of foreshore reserves along the southern shoreline is extremely variable. The Shoal Bay Foreshore Reserve, Little Beach Reserve and Nelson Bay Foreshore Reserve, and their associated car parks, become overcrowded during peak periods. The car parks that are shared by boat trailers and single vehicles become especially congested resulting in safety concerns and confrontations. On the other hand, the usage of other foreshore reserves along the Tomaree and Tilligerry Peninsulas is below capacity.

Congestion in Management Zone A1 can be eased by spreading usage more evenly along the entire southern foreshore. Such a strategy would involve disseminating information about the range of foreshore reserves along the southern shoreline through Council and community newsletters, advertising in the local media, and producing appropriate tourist information (tourist information centres, Council and tourism websites).

Reserves which have the capacity for more intense usage include:

- Bagnalls Beach;
- Pearson Park, Soldiers Point;
- Stony Ridge Reserve, Soldiers Point;
- Taylors Beach Reserve;
- Lower Tilligerry Creek reserves, Lemon Tree Passage;
- Western section of Kooindah Park;
- Mallabula waterfront reserve;
- Caswell Reserve, Tanilba Bay; and
- Peace Park and Foster Park, Tanilba Bay.

While it is possible to redistribute usage of foreshore reserves to a degree, it is necessary to accept that each reserve has a particular carrying capacity. The usage of some reserves is limited by car parking capacity, e.g. parking in the Nelson Bay foreshore area is limited by the surrounding urban development, and parking at Soldiers Point is limited by the physical landscape. On the other hand, a balance must be found between the development of car parks and retaining the undeveloped environment which is the original attraction.

8.5 Car Parks

As discussed in **Section 8.2**, the majority of foreshore reserves have an associated car park. Many of these are unsealed and take up a higher proportion of the reserve space than is necessary. Recommendations regarding individual foreshore car parks are detailed in **Section 12.0**, they mainly involve sealing/formalising the car park space and improving landscaping.

The following general management approaches should be considered with regard to foreshore car parks:

- the size and design of car parks that are associated with boat ramps should follow the NSW Public Works Department's *Boat Launching Ramps – Guidelines* (1985);
- the size of car parks in foreshore reserves should be kept to a minimum (while providing adequate capacity);
- car parks should not take up valuable open space on the foreshore;
- the environmental impacts of car parks should be minimised through appropriate design and engineering (refer to *Erosion and Sediment Control Policy*); and
- car parks should be landscaped with native trees and be made as visually unobtrusive as possible.

Investigation should be made into suitable temporary overflow parking areas away from foreshore reserves. These could be utilised during peak periods and particularly during special events such as fishing competitions or boating regattas. Some of these areas may be within walking distance of the reserves/facilities and in other instances shuttle buses could be used.

An additional option is to form staged parking areas. For example, open up sections of grassed reserve temporarily.

8.6 Walkways and Cycleways

Although formal walkways do not extend along the entire southern and inner shoreline, pedestrian access is possible along the majority of the foreshore. The formal walkways and cycleways are shown on **Figure 8.5** and listed in the **Foreshore Inventory**. The following walkways/cycleways are major foreshore attractions for both residents and tourists:

- Tomaree Headland Walk (within Tomaree National Park). A walkway to the top of Tomaree Headland. Provides extensive views of Port Stephens and the ocean.
- Shoal Bay Foreshore. A sealed footpath parallel to the beach in the Shoal Bay village area. Provides extensive views of the outer port.
- Fly Point. Although shared with vehicles, Victoria Parade is popular with pedestrians and cyclists.
- Nelson Bay Foreshore Reserve. A sealed footpath/cycleway that runs parallel to the bay between Fly Point and D'Albora Marina.



Source: Port Stephens Council

Note: Seaward study area boundary defined by -2 metre (AHD) contour.

0 1 2 4 km
1:90 000

Legend

- Study Area
- Existing Walkway/Cycleway
- Proposed Walkway/Cycleway

FIGURE 8.5

Current and Proposed Walkways/Cycleways

- The Bridle Walk. Extends from Apex Park (Nelson Bay), around West Point, to Dutchies Beach. Suitable for both pedestrians and cyclists.
- Corlette Headland. Corlette Point Park to Roy Wood Reserve. A Tidy Towns community service project. Picturesque walk around headland and bay. This pathway is unsealed.
- Wanda Wanda Head. Sealed footpath. Picturesque walk around headland.
- Tilligerry Creek Koala Walk. Partly sealed walkway that runs adjacent to the foreshore between Koala Shores Holiday Park and the Lemon Tree Passage commercial centre. The walkway incorporates boardwalks and runs through numerous foreshore reserves and parks. It provides views of Tilligerry Creek and Port Stephens, as well as the local flora, fauna and geology.
- Lemon Tree Passage to Mallabula Waterfront Walk. Unsealed route through foreshore reserve. Views of waterway and local flora and fauna.
- Tanilba Bay. Unsealed route through foreshore reserve and boardwalk adjacent to Tilligerry Habitat. Views of waterway and local flora and fauna.
- Oyster Cove. Walkway that follows a disused private road through a swamp mahogany forest. Provides views of Big Swan Bay.
- Yacaaba Headland Walk. A walk from Myall Lakes to Yacaaba Headland.
- Winda Woppa Reserve. Pathways through Winda Woppa Reserve.
- Tea Gardens Foreshore Pathway/Cycleway. Extends along the foreshore and forms part of the NSW Coastline Cycleway (see below).

Access to the foreshore by pedestrians and/or cyclists could be improved in the following locations:

- Anzac Reserve, Shoal Bay. A pathway/cycleway across this reserve, and extending to Fly Point to the west and Tomaree Headland to the east would improve foreshore accessibility in this area. These works are detailed in Council's *Proposed Cycleways and Footpaths*.
- Bagnalls Beach. A cycleway through Bagnalls Beach Reserve is currently being planned by Port Stephens Council. This would form a section of the NSW Coastline Cycleway, a Department of Planning project that aims to eventually create a continuous cycle route along the coastline between the Queensland border and the Victoria border. The Port Stephens section will extend along Nelson Bay Road, then north along Port Stephens Drive, east along Salamander Way, then north along Sandy Point Road. The proposed cycleway will enter Bagnalls Beach Reserve at Pantowora Street and connect to the existing cycleway behind Dutchies Beach in the vicinity of Burbong Street. The NSW Coastline Cycleway will end at Nelson Bay where riders will catch the ferry across the waterway to Tea Gardens and continue north from there. The proposed Bagnalls Beach cycleway will be funded partly by Port Stephens Council and partly by a grant provided by the Department of Planning.

There are three route options for the Bagnalls Beach Cycleway – the first runs along the waterfront, the second follows the existing track roughly through the centre of the Reserve, and the third runs immediately adjacent to Sandy Point Road. Community consultation is continuing regarding the preferred route.

- Bagnalls Beach to Corlette Point. Council's *Proposed Cycleways and Footpaths* involves extending the Bagnalls Beach cycleway/pathway to Corlette Point. The proposed cycleway leaves the foreshore for a short distance in the Sandy Point area and joins Sandy Point Road. While this is most suitable for cyclists, it is considered that pedestrian access along the entire foreshore is possible. Currently public access is discouraged by the 'private' appearance of the Sandy Point waterfront. This could be counteracted with appropriate signage. An unsealed or more informal pathway would be appropriate in this context.
- Salamander Bay. Council's *Proposed Cycleways and Footpaths* includes a cycleway along the entire margin of Salamander Bay, although it diverts to roads where the space between the waterway and private residences is inadequate. As for the Bagnalls Beach to Corlette Point section, it is considered appropriate that pedestrian access be maintained along the entire foreshore. This could be in the form of an informal pathway indicated by signage stating that the foreshore is public land.
- A cycleway from Pearson Park to Diemar Point is proposed in Council's *Proposed Cycleways and Footpaths*. The current study supports this proposal.
- Lemon Tree Passage to Mallabula. This study supports the proposed cycleway from Mungarra Reserve to Rudd Reserve, and along the western foreshore of Tanilba Bay. The possibility of a footpath extending between Rudd Reserve and Caswell Reserve should also be considered.

Port Stephens Council proposals for cycleways are aligned with the relevant State plans wherever possible.

8.7 Dog Exercise Areas

Dog Exercise Areas, both on-leash and off-leash are common in foreshore reserves. The following issues have been identified with regard to these areas:

- faecal contamination in the Bagnalls Beach area has been traced to dogs. While the source of this is likely to be the wider surrounding area, there is potential for water quality problems at foreshore dog exercise areas;
- the more intensive use of Kooindah Park, Lemon Tree Passage and Bagnalls Beach Reserve for passive recreation (a strategy recommended to take pressure off Shoal Bay and Little Beach) is not consistent with an off-leash dog exercise area; and
- an off-leash area is located immediately adjacent to the Tilligerry Habitat, a preferred koala habitat. This is an inappropriate area for uncontrolled dogs.

It is considered that Dog Exercise Areas in the foreshore zone should be restricted to on-leash areas. This reduces the potential for koala injury and fatality. It also improves dog owners' awareness of dog excrement and its appropriate disposal, decreasing the potential for water quality problems in the adjacent waterway.

Recommended management actions relating to Dog Exercise Areas are:

- investigate alternative off-leash areas away from the immediate foreshore at Tanilba Bay, Lemon Tree Passage and Bagnalls Beach;
- change the off-leash dog exercise area on the eastern foreshore of Tanilba Bay to an on-leash area once an alternative area has been identified;

- change the off-leash dog exercise area in Kooindah Park, Lemon Tree Passage to an on-leash area once an alternative area has been identified; and
- change the off-leash dog exercise area in Bagnalls Beach Reserve to an on-leash area once an alternative area has been identified.

8.8 Protection of Ecological Habitat

The majority of remaining natural vegetation along the southern foreshore is located within public land. This provides an opportunity to manage remnant vegetation effectively while at the same time providing areas for public recreation. While Council and community groups have effectively rehabilitated and maintained foreshore vegetation, formal guidelines regarding the maintenance of reserves and the vegetation contained within them should be prepared. These would provide information about appropriate use of fertilisers/pesticides, mowing buffers, management of sea grass wrack etc. Suggested content of these guidelines is contained in **Appendix 4**. An example of a community awareness kit to improve community management of foreshore ecological values is the 'Wrack or Ruin' package prepared by the Office of Lake Macquarie and Catchment co-ordinator.

8.9 Aboriginal Heritage

A large number of Aboriginal heritage sites occur within foreshore reserves (refer to **Section 5.0**). These relatively undeveloped areas also often have the potential to contain sub surface and previously unrecorded Aboriginal heritage material. In addition to the physical evidence of traditional Aboriginal occupation, some areas have mythological or ceremonial stories associated with them, and some are important to the local Aboriginal community for contemporary reasons.

Since reserves contain the majority of surviving Aboriginal heritage sites, they play an important role in their long term conservation. The management and maintenance of reserves must therefore be undertaken in such a way that heritage sites are protected. It is essential that people working in these areas are aware of the existence or potential existence of middens, artefact scatters, scarred trees, and other archaeological sites. They should also be aware of their responsibilities under the *NPW Act* which protects such sites.

As discussed in **Section 5.5** it is recommended that Great Lakes Council and Port Stephens Council prepare Aboriginal Heritage Plans for each LGA. These would be undertaken in partnership with the local Aboriginal community and would guide the long term management of Aboriginal heritage.

In the short term, both Councils should produce *Parks and Reserves Maintenance Guidelines* for Council employees and members of organisations such as Landcare and Tidy Town Committees that specifically addresses management of Aboriginal sites. General guidelines with regard to Aboriginal heritage are contained in **Appendix 4**. An example of local government guidelines in relation to involving and consulting the local Aboriginal community in Landcare activities has been prepared by Lake Macquarie City Council

8.10 Contribution to Visual Amenity

Foreshore reserves play a vital role in the visual amenity of the Port Stephens area because they provide the areas of 'naturalness' which are the basis of the area's beauty and

community attachment. The public ownership of these reserves and their zoning as recreation and/or conservation areas ensures that the visual amenity of reserves is a major consideration in their management. The suggestions made in **Section 7.0** and throughout **Section 12.0** will build on existing management frameworks.

8.11 Foreshore Erosion

Many foreshore reserves have been affected by foreshore erosion and are now protected by rock revetment or sand renourishment programs. These management strategies have been successful in some locations, e.g. Shoal Bay sand renourishment program, but less successful in others, e.g. the failed rock revetment in front of Kooindah Reserve, Lemon Tree Passage, and Peace Park, Tanilba Bay. Poor design and construction of foreshore protection structures can interfere with access to the beach or intertidal zone, create risks to public safety, and have a negative impact on visual amenity. These issues and recommendations regarding more appropriately designed structures are discussed in **Section 10.5**. Management action for the protection of the foreshore of specific reserves is also detailed in **Section 12.0**. Any foreshore structures below Mean High Water Mark require authorisation by the Department of Lands (see **Section 10.4**).

8.12 Current Management and Identified Management Action

8.12.1 Acquisition and LEP Zoning

As discussed in **Section 8.1.1**, the majority of foreshore public reserves within the Port Stephens LGA are zoned either 6(a) General Recreation or 7(a) Environment Protection. The general objective of 6(a) General Recreation is to ensure that there is adequate open space for public use. The general objective of 7(a) Environment Protection is to protect environmental values. Neither zone recognises the unique combination of recreational and environmental values that characterises the foreshore. The zone 1(a) Rural Agriculture which applies to the majority of the shoreline also does not recognise the important foreshore values. Consequently, the following areas should be considered for acquisition, rezoning to Environment Protection, or become the subject of an Estuary Foreshore DCP:

- Those areas along the southern and inner foreshores that are currently zoned 6(a) General Recreation and 7(a) Environmental Protection (rezone/DCP). This should not prevent limited environmentally sympathetic commercial development in locations such as Nelson Bay (as described in the Foreshore Plan of Management), Shoal Bay and Karuah.
- Mud Point and the southern margin of Cromartys Bay (acquire/rezone/DCP).
- Incorporate the northern foreshore of Reedy Creek (currently Crown land) into Worimi Nature Reserve.
- Tilligerry Creek and Fenningham's Island Creek (rezone/DCP).
- Swan and Wirrung Islands (rezone/DCP).
- Those areas along the Tea Gardens/Winda Woppa/Hawks Nest foreshore that are currently zoned 6(a) Open Space and Recreation (rezone/DCP).
- The foreshore of Number One Cove (acquire/rezone/DCP).

- The northern and eastern foreshore of North Arm Cove (acquire/rezone/DCP).
- The northern foreshore of Fame Cove (acquire/rezone).
- The foreshore between Myall Lakes National Park (Fame Point) and Lower Pindimar.

The areas identified for acquisition/rezoning/DCP are shown on **Figure 8.2**.

8.12.2 Councils' Foreshores Generic Plans of Management

The management of Council owned reserves and Council managed Crown reserve is based on each Council's *Foreshores Generic Plan of Management*. Such a plan of management is required under the provisions of the *Local Government Act 1993*.

The core objectives for the management of community land categorised as foreshore area:

- (a) To maintain the foreshore as a transition area between the aquatic and the terrestrial environment, and to protect and enhance all functions associated with the foreshore's role as a transition area, and
- (b) To facilitate the ecologically sustainable use of the foreshore, and to mitigate impact on the foreshore by community use (PSC 2001 and GLC 2004).

Each of the Generic Plans sets out the issues and policies that apply to foreshore reserves. The issues addressed include public access, the protection of ecological habitat, impacts on neighbouring properties, and the development and provision of infrastructure and facilities. There are a number of additional issues and policies that should be incorporated into these plans during their next regular review. These are outlined below.

The following additions should be incorporated into the Port Stephens Council Foreshores Generic Management Plan:

- add the current Plan (the Port Stephens Foreshore Management Plan) to the list of major legislation, planning instruments and policy documents that are relevant to foreshore areas;
- add a Policy Statement regarding Aboriginal heritage values, e.g. 'The Aboriginal heritage values of the site shall be protected and enhanced'. Refer to the *Parks and Reserves Maintenance Guidelines (Appendix 4* of the current Plan);
- add a Policy Statement regarding foreshore protection measures. Refer to the current plan for guidelines on the appropriate design and construction of foreshore protection structures;
- add a Policy Statement regarding visual amenity. Refer to the current Plan for relevant management actions; and
- refer to the current Plan for management actions regarding ecological habitats, water quality, and facilities within reserves.

The following additions should be incorporated into the Great Lakes Generic Foreshore Management Plan:

- Add Aboriginal heritage, foreshore erosion and visual amenity to the list of 'Management Issues'.

- Refer to the information and management recommendations made in the current Plan with regard to foreshore protection, ecological habitats, water quality and facilities within reserves.

8.12.3 Management Plans for Individual Reserves

There are currently individual Plans of Management for:

- Shoal Bay (Shoal Bay Foreshore Management Plan and Landscape Strategy);
- Soldiers Point (Soldiers Point Plan of Management);
- Mambo Wetland (Mambo Wetland Plan of Management);
- Twelve Mile Creek (Twelve Mile Creek Catchment Management Plan);
- Nelson Bay Foreshore Plan of Management; and
- Tilligerry Creek (Tilligerry Creek Catchment Management Plan).

It is recommended that individual Plans of Management be compiled for:

- Shoal Bay Wetland;
- Bagnalls Beach Reserve;
- Stony Ridge Reserve;
- Mallabula/Rookes Point Reserves;
- Worimi Nature Reserve;
- Fame Point section of Myall Lake National Park;
- Yacaaba Headland section of Myall Lakes National Park; and
- Jimmys Beach Reserve.

These Management Plans should address:

- how the provision of recreational facilities and the conservation of the natural environment will be balanced;
- the particular assets of that reserve and why they are significant;
- how the care and maintenance of the reserve will be undertaken in a way that protects the ecological and cultural values of the reserve;
- how Aboriginal sites (if any) will be conserved and managed;
- reserve design and landscaping concepts; and
- how stakeholders and the community will be involved in the management of the area.

Many of these plans will address areas of Regional Crown Reserve and so will require a partnership between Councils and the Department of Lands.

8.12.4 Port Stephens Council Forward Works Program

The Forward Works Program provides a systematic approach to the planning of infrastructure projects in the Port Stephens LGA. Projects are ranked by assessing them against a number of criteria. The annual budget is allocated by Council once the Forward Works Program has been finalised each year.

The current Forward Works Program for includes:

- improvements to the Nelson Bay foreshore, including viewing platforms, lighting and parking improvements;
- sealing of various foreshore reserve car parks;
- improvements to the Shoal Bay foreshore, including the installation of a children's playground;
- upgrading of Shoal Bay Jetty; and
- improvements to facilities within Bagnalls Beach Reserve.

Many of the improvements identified in the current Plan have already been incorporated into the Forward Works Program.

8.12.5 Public Accessibility

The accessibility of public land is an objective of many plans and policies. For example, Objective 7.1 of the NSW Coastal Policy is 'to increase public access to foreshores when feasible and environmentally sustainable options are available'. The associated Strategic Actions include:

- 7.1.1 The acquisition of significant sites adjacent to the coastline to increase opportunities for public access to and along the foreshore will continue;
- 7.1.2 Public facilities will be provided at appropriate locations and with appropriate safety standards to facilitate fair and equitable access to and enjoyment of the recreational amenity of the coast and estuary foreshores;
- 7.1.3 Public access to council owned coastal lands should be facilitated by:
 - the preparation of plans of management for council community land which facilitate appropriate access;
 - the provision of appropriate access to council owned operational land;
 - leasing arrangements for council owned coastal land which maximise public access opportunities.

Port Stephens Council's DCP10 – Building Standards and Notification Procedures details appropriate building setbacks. One of the aims of this DCP is for adequate setback to ensure the public use of waterfront reserve is not discouraged or intimidated by proximity of buildings.

Additionally, both Councils' Generic Foreshore Management Plans stress the importance of maintaining public access through reserves.

Recommended management actions which will improve public access around the Port Stephens foreshore include:

- the acquisition of land along the northern shoreline of Port Stephens (see **Section 8.11.1**). Public ownership would not only allow increased public access to this shoreline but would also provide a higher level of control over the planning and development of a shoreline which is subject to intense development pressure. The acquisition of this land would require a whole of government approach;
- the establishment of a specific Foreshore Environmental Protection Zone or the development of an Estuary Foreshore DCP that addresses public accessibility (see **Section 8.1.1**);
- extensions to the existing pathway/cycleway system around the foreshore (see **Section 8.5**); and
- removal of privately built and unauthorised structures (e.g. ramps) that extend across foreshore reserves, and rehabilitation of poorly designed and constructed foreshore protection structures (see **Section 10.5.1**).