

O'Hara Head Reserve, *Kioloa*

Plan of Management

SCC PoM No. 15



Adopted by Council
April 2006

SCC File 28769

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Preface

Shoalhaven City Council, in consultation with the community, has prepared this Plan of Management for the public foreshore land between Kioloa Beach and Merry Beach, including O'Hara Head.

The Plan of Management sets out how the reserve can be used, managed, developed and conserved, and specifies site improvements to better meet the recreational needs of residents and visitors to the area.

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LIST OF RELEVANT DATES AND AMENDMENTS

	Adopted For Exhibition	Exhibited	Adopted by Council	Notes
Plan of Management	20 December 2005	25 January to 10 March 2006	24 April 2006	

Contents

1	Introduction	1
1.1	Background	1
1.2	Purpose of this Plan	1
1.3	What We Want To Achieve In Preparing The Plan	2
1.4	Legislative and Policy Framework	2
1.5	Plan Review.....	2
2	The Site	4
2.1	Land to Which This Plan Applies	4
2.2	Description of the Land, Facilities and Existing Uses	8
2.2.1	Landform and Geology	8
2.2.2	Native vegetation.....	8
2.2.3	Buildings and other structures	9
2.2.4	Uses of the Reserve	10
3	Basis for Management.....	15
3.1	Community Values – What’s Important About the Place	15
3.2	Principles of Crown Land Management & Purpose of Reservation ..	15
3.3	Ecologically Sustainable Development.....	17
3.4	Management Objectives	18
4	Issues	19
4.1	Royal Volunteer Coastal Patrol Kioloa Division (RVCP)	19
4.2	Walks and Pedestrian Access	20
4.3	The Boat Ramp, Car Park and Access from Scerri Drive	23
4.4	Reserve Character and Maintenance	29
4.5	Cultural Heritage - Aboriginal and Timber Industry	30
4.6	Potentially Contaminated Land.....	31
4.7	Special Events.....	31
4.8	Vegetation Removal	32
4.9	Authorised Occupancies.....	34
4.10	Unauthorised Encroachments	34
4.11	Bushfire mitigation	35
4.12	Introduced Plants and Animals	36
4.13	Dogs	38
4.14	Commercial Use Opportunities	39
4.15	Coastal Dune System and Coastal Hazards.....	40
4.16	Native Title.....	41
4.17	Adjoining Public Land	41
4.17.1	Crown Reserves at Kioloa Beach and Merry Beach	41
4.17.2	Council Owned Land	42
5	Permissible & Prohibited Uses.....	45
6	Action Plan.....	48

7	Appendices	57
7.1	Appendix 1 - Legislative & Policy Framework.....	57
7.1.1	Crown Land, the Reserve System and Trust Management.....	57
7.1.2	Crown Lands Act 1989	58
7.1.3	Crown Lands Regulation 2000	59
7.1.4	Coastal Crown Lands Policy.....	60
7.1.5	NSW Coastal Policy 1997	60
7.1.6	NSW Coastline Hazard Policy 1990	60
7.1.7	NSW Environmental Planning & Assessment Act 1979	60
7.1.7.1	Environmental assessment.....	61
7.1.7.2	Local Environmental Plan	61
7.1.7.3	State Environmental Planning Policy (SEPP) No. 71 - Coastal Protection.....	61
7.1.8	The Local Government Act, 1993.....	61
7.1.9	Marine Parks Act 1997	62
7.1.10	Rural Fires Act 1997.....	62
7.1.11	Native Vegetation Conservation Act, 1997.....	63
7.1.12	Rivers and Foreshores Improvement Act, 1948.....	63
7.1.13	Shoalhaven City Council Foreshore Reserves Policy (2005).....	63
7.1.14	Shoalhaven City Council Recreation Strategy (1999)	63
7.1.15	Food and Beverage Outlets on Crown Reserves, 2001	64
7.1.16	Wedding Receptions On Public Parks.....	65
7.2	Appendix 2 – Plant Species List	66
7.3	Appendix 3 – Consultation.....	68
7.3.1	Recreation Study	68
7.3.2	Kioloa Specific Consultation	70
7.4	Appendix 4 – Kioloa Beach Holiday Park Reserve	83
7.4.1	Sewage Effluent Disposal.....	83
7.4.2	Maintenance	84
7.4.3	Facilities / Showers.....	84
7.4.4	Use of Reserve by Kioloa Beach Holiday Park Patrons.	85
7.4.5	Beach Access and Dune Protection.	85
7.4.6	Weeds.	86
7.4.7	Dumped soil.....	86
7.4.8	Northern Car Park	87
7.4.9	Creek Bank Erosion.....	88
7.5	Appendix 5 – Kioloa Sawmill Heritage Inventory Extract	89

1 Introduction

1.1 Background

Public land provides the people of New South Wales with a variety of open spaces, including local and regional parks, showgrounds, picnic areas, caravan parks and camping grounds. Along our coast there is a network of public land reserved for those uses and for the preservation of significant areas of natural bushland and coastal ecosystems. The system has developed since the 1850s in recognition of the basic needs of all members of our community to access open spaces for physical, emotional and spiritual development and well-being.

Some public land is State owned and is managed by the New South Wales Government (e.g., Crown land managed by Dept of Lands or National Park managed by Dept of Environment and Conservation [NPWS]). However, there are also large areas of State owned Crown land that are managed by local councils, either as reserve trust manager appointed under the Crown Lands Act 1989 or because the land has devolved to them under section 48 of the Local Government Act 1993. Another type of public land is actually owned by councils and may be managed as community land or operational land under the Local Government Act 1993.

Kioloa is on the south coast of New South Wales, in the southern part of the City of Shoalhaven. At Kioloa, on O'Hara Head and surrounds, there is a variety of Crown reserves and undedicated Crown lands that are earmarked for rationalisation into a single reserve for the purposes of Public Recreation and Coastal Environmental Protection. Council is already responsible for management of some of the existing Crown reserves. The remainder of the Crown land has been managed by the New South Wales Department of Lands (see Figure 3). The proposed new reserve would be managed by Shoalhaven City Council through the Shoalhaven City Foreshore Reserves Trust.

The land is used by many people, both Shoalhaven residents and visitors, with flow-on social and commercial benefits to the local community. The area has many significant recreational, social, natural, cultural and scenic values. At present, the Crown reserves provide a site for the Royal Volunteer Coastal Patrol, a boat ramp, picnic facilities, beach access points and a range of recreation opportunities including fishing and walking.

1.2 Purpose of this Plan

This plan has been prepared to assist Council in its future management of the reserve. A plan of management is a document that provides a framework for how a particular resource will be managed. Shoalhaven City Council already has generic plans of management that cover most Council-owned community land. Council also has a growing number of area-specific plans of management that provide a more detailed and specific management regime for some Crown reserves and some Council owned community land reserves.

Prior to Council taking on management responsibility for the new Crown reserve at Kioloa, a review of its current condition and uses has been carried out, in an effort to determine which uses are sustainable in the long term and identify priority works that need to be done on specific sites. This plan has been prepared to document that assessment. It sets out how the reserve can be used, managed, developed and conserved, and specifies site improvements to better meet the recreational needs of residents and visitors to the area. It includes the results of consultation with the community on how they believe the land should be managed. Recommendations are also made for management of some adjacent areas of public land.

The plan aims to ensure the protection of significant values and to provide for sustainable opportunities for recreational development.

1.3 What We Want To Achieve In Preparing The Plan

In preparing this plan, we have, in consultation with the community:

- Identified the significant values of the reserve, i.e., what's important about the place.
- Established a broad basis for management of the reserve to protect and enhance the identified values. This describes where we want to end up and will provide the grounds for making further decisions.
- Determined appropriate, specific management objectives that will ensure the maintenance of recreational, social, natural, cultural and scenic values.
- Identified issues or problems that may detract from the reserve's values.
- Developed a comprehensive action plan to show how each objective will be put into practice.

1.4 Legislative and Policy Framework

The management of public land requires compliance with existing government legislation and policy. This plan has been prepared according to the provisions of the Crown Lands Act 1989. The basis for management that is provided for in the Act is set out in section 3 of this plan.

In addition to the requirements of the Crown Lands Act, the plan of management must comply with all other relevant legislation and policy, across all three levels of government. Examples of other legislation and policy which must be taken into account include the Local Government Act 1993, the Environmental Planning and Assessment Act 1979 and associated instruments such as the Shoalhaven Local Environment Plan 1985, the NSW Coastal Policy and Council's Foreshore Reserves Policy. A description of these, and other relevant legislation and policy, is provided in Appendix 1.

1.5 Plan Review

This plan should be reviewed at least every five years to ensure that it remains relevant and useful. Implementation of the action plan (section 6)

should be reviewed annually. The plan should also be reviewed if there are significant changes to the factors that guided the development of the “Basis for Management” (section 3) or if significant issues arise that are not covered by the plan. The Minister administering the Crown Lands Act may adopt a new plan, following consideration of any comments made during public exhibition of such a plan.

2 The Site

2.1 Land to Which This Plan Applies

Figure 1 shows the boundary of the proposed new Crown reserve to which this plan will apply. Council owned community land adjacent to the subject Crown land and nearby Crown reserves that are associated with the Merry Beach Caravan Park and the Kioloa Beach Holiday Park are not covered by this plan of management, but some management recommendations for those areas are included nevertheless.

The land covered by the plan extends from the southern boundary of the Kioloa Beach Holiday Park southward to the northern boundaries of the Murramarang National Park and the Merry Beach Caravan Park. It incorporates all of the Crown land on O'Hara Head, down to mean high water mark.

The new Crown reserve is to be formed from an amalgamation of a variety of Crown reserves and undedicated Crown lands as described in Table 1 and shown in Figure 2. The Crown land is to be reserved for the purpose of public recreation and coastal environmental protection. A land assessment under the Crown Lands Act was carried out in 1991.

It had been proposed that the area between high and low water mark around O'Hara Head be incorporated into the new Crown reserve to be managed by Council. However, while this plan of management was being prepared, the NSW Government declared the waters around O'Hara Head, including the intertidal areas, as part of the Batemans Marine Park. The Marine Parks Authority recommended that intertidal areas should not be incorporated into the Crown reserve, thereby providing a clear line of responsibility for all intertidal areas within the whole marine park and avoiding any potential for conflicting management arrangements.

Excluding intertidal areas from the reserve to be managed by Council is supported by Council, except that the boat ramp and break wall, as Council assets should be included in the area managed by Council.

The approximate areas of the various components of the reserve are shown in Table 1. By these dimensions, the total area of the proposed new reserve is 36.6 hectares. Council currently manages 28.6 hectares of the total area. This is shown graphically in Figure 3.

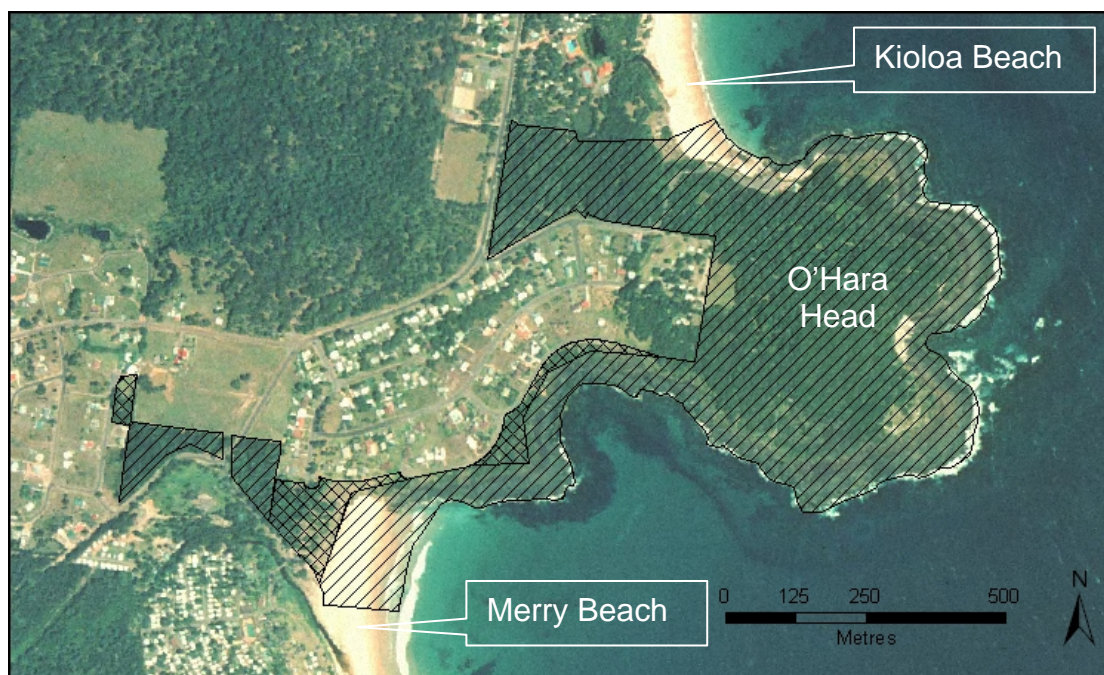


Figure 1. The Crown land covered by this plan of management, shown by single diagonal hatch. The crosshatch shows the adjacent Council owned community land.

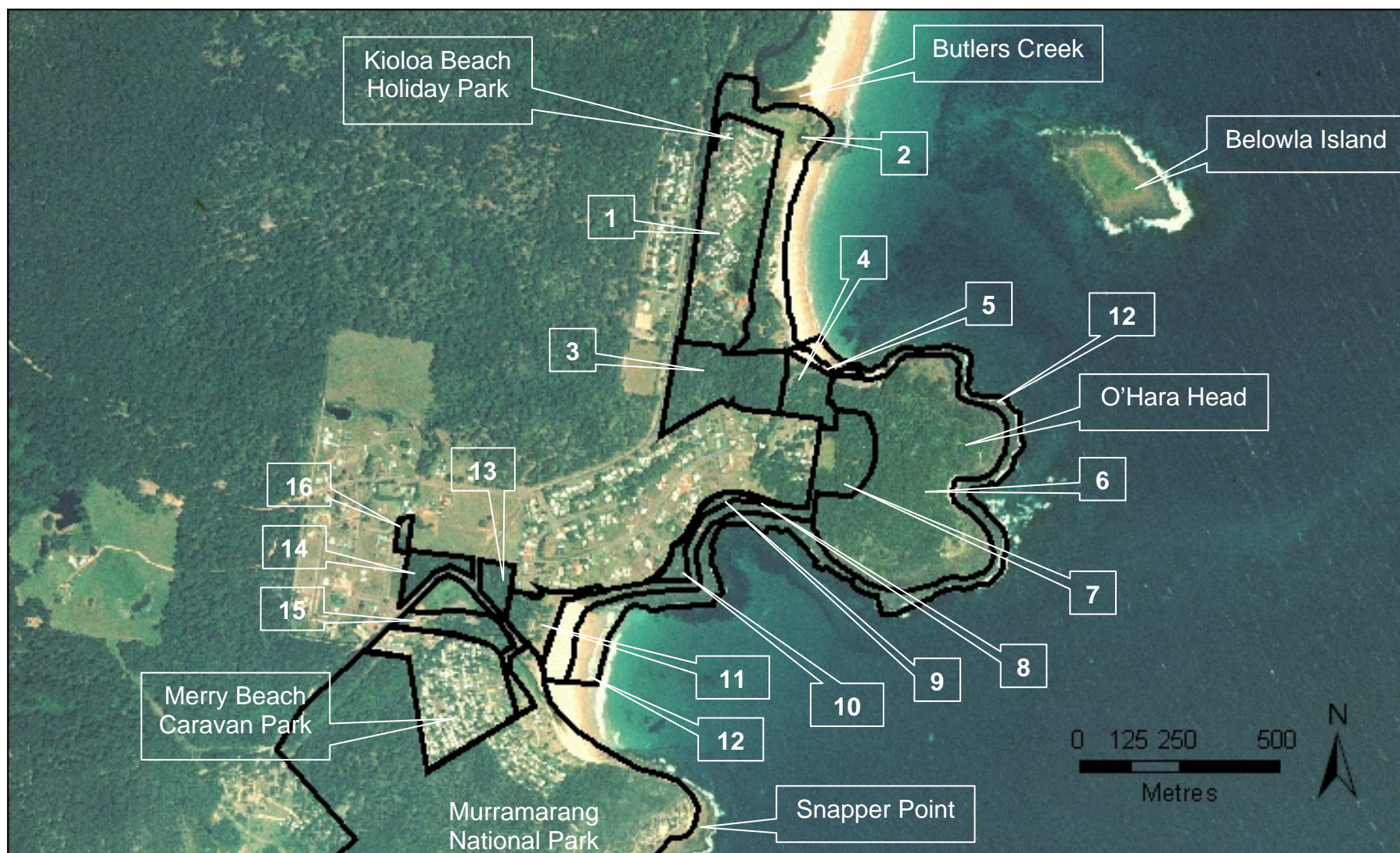


Figure 2. Parcels of land that make up the planning area and some adjacent areas of Crown land and Council land. The numbers refer to the information in Table 1.

Table 1. Parcels of land included in this plan of management (unshaded rows) and some adjacent areas of Crown land and Council land (shaded rows). The numbers in the first column correspond with those in Figure 2.

	Property Description	Council Reserve No	Crown Reserve No	Reserve Name	Land Tenure	Crown Land Purpose or Community Land Category	Current Management Arrangement	Approximate Land Area (hectares)
1	Lot 128 DP 40869	-	Part 96797	Kioloa Beach Holiday Park	Crown Reserve	Public Recreation Notified 10.6.1983	Leased to Kioloa Resort	9.2
2	Part Lot 130 DP 40869	-	Part 96797	-	Crown Reserve	Public Recreation Notified 10.6.1983	Licensed to Kioloa Resort	6.8
3	Part Lot 130 DP 40869	SKI 703	87858	-	Crown Reserve	Public Recreation and Access Notified 28.8.1970	Devolved to Council	4.7
4	Part Lot 130 DP 40869 & Lot 51 DP 755941 (Por 51)	SKI 703	75768	-	Crown Reserve	Camping and Public Recreation Notified 24.4.1953	Devolved to Council	1.8
5	Lot 26 DP 755941 (Por 26) & Lot 25 DP 755941 (Por 25) & Lot 24 DP 755941 (Por 24)	-	78873	-	Crown Reserve	Access Notified 7.9.1956	Dept of Lands	0.5
6	Lot 7002 DP 1020453 & Lot 34 DP 755941 (Por 34) & Part Lot 1 DP 758575 Secs 2 & 5	SKI 923	75773	O'Hara Head Reserve	Crown Reserve	Public Recreation Notified 24.4.1953	Council Trust Manager	22.1
7	Part Lot 1 DP 758575 Secs 2 & 5 & Lot None Sec 1 & land between HWM and council owned land	-	-	-	Unreserved Crown land	-	Dept of Lands	5.5
8	Lot 3 DP 831365	SKI 879	-	-	Community Land	Natural Area Bushland	Council owned	0.1
9	Lot 1 DP 837014	SKI 879	-	-	Community Land	Natural Area Foreshore	Council owned	0.4
10	Lot 42 DP 261112	SKI 879	-	-	Community Land	Natural Area Bushland	Council owned	0.5
11	Lot 30 DP 260231	SKI 878	-	-	Community Land	Natural Area Bushland	Council owned	1.7
12	-	-	-	-	Unreserved Crown land between HWM and LWM Batemans Marine Park		Dept of Lands & Marine Parks Authority	Unknown
13	Lot 105 DP 755941 (Por 105)	-	-	-	Unreserved Crown land	-	Dept of Lands	0.9
14	Lot 127 DP 755941 (Por 127)	-	-	-	Unreserved Crown land	-	Dept of Lands	1.1
15	Lot 7001 DP 1020454	SMB 920	87414	-	Crown Reserve	Public Recreation and Access Notified 3.10.1969	Devolved to Council	1.6
16	Lot 14 DP 740846	SKI 877	-	Brace Close Reserve	Community Land	Park	Council owned	0.3

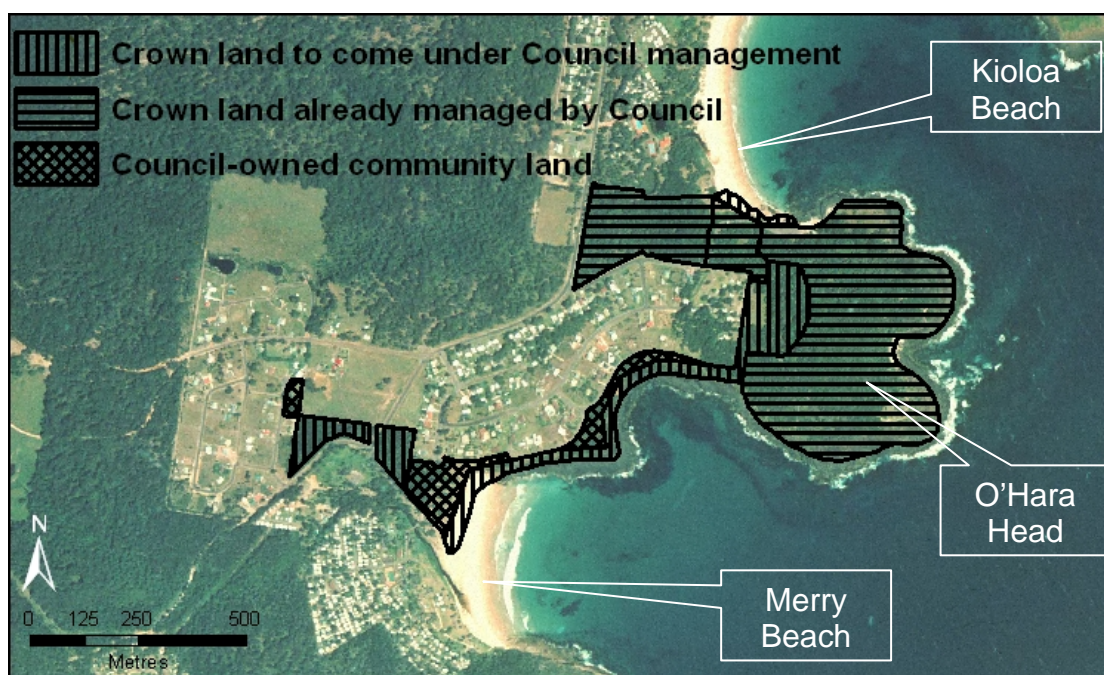


Figure 3. Tenure of land prior to creation of new reserve.

2.2 Description of the Land, Facilities and Existing Uses

2.2.1 Landform and Geology

The planning area covers a number of coastal landforms. O'Hara Head (Figure 4) stands just over thirty metres above sea level at its peak. It consists of an igneous rock intrusion (monzonite) in the more typical sedimentary geological formations of surrounding areas (compare Figure 4 with Figure 9). It is a steep-sided headland with rock cliffs, boulder fields, rock platforms and a small rock and shell beach at its eastern end (Figure 6). To the north and south of O'Hara Head are small sandy bays with beaches (Kioloa Beach and Merry Beach) that are typical of the south coast of New South Wales. Inland from the beaches is a narrow dune system and a low-lying coastal plain. These low areas are often inundated by direct runoff from higher ground after heavy rain.

2.2.2 Native vegetation

The vegetation communities in the reserve consist of many species of plants. The following is a brief description and more extensive species lists are included in Appendix 2.

The vegetation on O'Hara Head is predominantly woodland with Bangalay (*Eucalyptus botryoides*) and Coast Banksia (*Banksia integrifolia*) as the main tree species. In places, particularly towards the southern side of the headland, the vegetation is moister in nature, including species such as Sweet Pittosporum (*Pittosporum undulatum*). On the north eastern edge of the headland there is a stand of Swamp Oak (*Casuarina glauca*) (Figure 7).

On the south western part of the headland adjacent to Panamuna Place, Coast Banksia (*Banksia integrifolia*) and Coast Rosemary (*Westringia fruticosa*) are common. Old photographs of the former sawmill show that parts of the headland were cleared of native vegetation. Some of these areas now have regrowth on them, with Coast Banksia (*Banksia integrifolia*) being virtually the only tree species in some places.

Native vegetation present along the frontal dunes of Merry Beach and Kioloa Beach commonly includes the following species:

- Beach Spinifex (*Spinifex sericeus*)
- Coastal Pigface (*Carpobrotus glaucescens*)
- Spiny-Headed Mat Rush (*Lomandra longifolia*)
- Coast Banksia (*Banksia integrifolia*)
- Bangalay (*Eucalyptus botryoides*)
- Swamp Oak (*Casuarina glauca*).

The part of the reserve to the west, between Boomer Crescent and Brace Close, is vegetated with a number of eucalypt species, as well as a dense and diverse understorey of wetland species in the lower areas and heath species on the higher ground.

2.2.3 Buildings and other structures

There are few structures on the O'Hara Head Reserve.

On the northern side of O'Hara Head, where the southern end of Kioloa Beach joins the rock platform, there is a public concrete boat ramp and associated rock breakwall. The access road to the ramp from Scerri Drive is on the reserve and so is the boat ramp car park.

The Royal Volunteer Coastal Patrol Kioloa Division base is located at the eastern end of the boat ramp car park in a Council owned building that also houses a public amenities block. The public amenities block is one of two such facilities in the village of Kioloa. Also in this part of the reserve are picnic tables and an electric barbecue. A concrete driveway to the Coastal Patrol building and a concrete footpath to the amenities block were improved in 2003. To the northeast of the Coastal Patrol building, a short section of pedestrian path was improved in 2004, leading to a seat overlooking the sea.

A crushed sandstone pedestrian path was built in 2004 from Scerri Drive through the vegetation to the west of the boat ramp access road. It ends on the road verge part way down the access road, but will be continued to the beach. Two pedestrian beach accessways were also built at that time. The easternmost was built as stairs, while the westernmost was built as a ramp so that it could also provide for emergency vehicle access to the beach.

On the foreshore to the west of the boat ramp are concrete and steel remains of a timber mill that was last operational in the 1920s. The remains of a boiler

can be seen in the bush just to the south of the car park. A mooring anchor that was used by vessels that picked up timber is on display near the Coastal Patrol building.

In the southern part of the reserve, at the end of Merry Beach Road, there is an unsealed car parking area. Part of it is on Lot 30 DP 260231, which is Council-owned community land, and part of it is on Lot 7006 DP 1020489, which was Crown reserve, but was added to the Murramarang National Park in 2001.

In the dunes behind Merry Beach there are broken remains of septic tanks that were in use when the area was part of a caravan park.

On the foredune at Merry Beach, between the car park at the end of Merry Beach Road and the beach itself, there is a water pump housed in a brick structure and associated subsurface cables, pipelines and spear points. The equipment is used to pump bore water to supplement supplies at the Merry Beach Caravan Park during periods of peak occupancy.

2.2.4 Uses of the Reserve

The main uses of the reserve are informal recreation (i.e. not organised sports), including activities associated with boating, the beach and the rocky shores, and the bushland. Table 2 gives an indication of the most popular activities carried out in the reserve. One respondent indicated that they carried out a commercial activity but that activity was adjacent to the reserve, not on it.

Table 2. Responses to community survey distributed in October 2003, showing how the reserve is used. Total number of responses 116 - see Appendix 3 for detailed results of the community survey.

Number of people that indicated they do it		Total number of people days per year ¹	
beach walking	107	appreciating view	13798
appreciating view	101	beach walking	9996
swimming	97	bird watching	8774
bush walking	88	walking dog	6388
bird watching	73	swimming	5731
relaxing	69	bush walking	4588
fishing from shore	65	relaxing	2982
launching boat	48	fishing from shore	2795
socialising	46	launching boat	1947
picnicking/BBQs	46	socialising	1782
walking dog	45	picnicking/BBQs	842
snorkelling/diving	34	snorkelling/diving	786
playing games	26	jogging	668
jogging	18	playing games	596
other ²	14	other	275
commercial	0	commercial	0

¹ People were asked to write down the number of days they do each activity in a year. The numbers in this column are all the days that everyone wrote on the survey form added together, giving an indication of the total amount of pressure from each activity. For example, notice that the number of people that walk their dog in the reserve is well down the list on the left (number of people that do it) but quite high in the list on the right (total number of days on which dogs are walked).

² Activities specified in the "other" category were whale watching (3), supporting RVCP & RFS (2), cycling (2), surfing (1), water aerobics (1), teaching child (1), clambering over rocks (1), maintaining firebreak (1), spearfishing (1), healthy lifestyle (1).



Figure 4. O'Hara Head viewed from Kioloa Beach



Figure 5. View South from O'Hara Head. Snapper Point in Murramarang National Park is in the foreground.



Figure 6. The small beach on the eastern end of O'Hara Head.



Figure 7. The *Casuarina* woodland on the north-eastern point of O'Hara Head.



Figure 8. The threatened Sooty Oystercatcher feeds on the shorelines in the reserve and nests on the offshore islands.



Figure 9. Whales can be seen from O'Hara Head (if you're lucky!). Snapper Point in Murramarang National Park is in the background.

3 Basis for Management

The “Basis for Management” is what underpins the way Council will manage the reserve in the future. The basis for management describes the stakeholders’ fundamental expectations and provides directions for making decisions. Stakeholders include resident and visiting community members, community organisations, Council and Government agencies. The basis for management is therefore derived from community values and from legislative and policy requirements as described below and it includes management objectives that aim to protect and enhance the reserve’s values.

3.1 Community Values – What’s Important About the Place

The values that the community places on the O’Hara Head Reserve have been revealed through a community survey specific to the area and through Council’s broader Recreation Study. They are described in detail in Appendix 3. It is clear that the O’Hara Head Reserve is valued greatly by the community. Their importance relates to recreational, social, natural, cultural and scenic values.

The principal community values for the reserve are summarised in the box on the next page.

3.2 Principles of Crown Land Management & Purpose of Reservation

The Crown Lands Act 1989 (see Appendix 1) requires that Crown land must be managed for the benefit of the people of New South Wales according to broad principles of:

- protecting the environment,
- conserving natural resources and
- encouraging multiple use, including sustainable public use and enjoyment.

The Crown land covered by this plan is to be reserved under the Crown Lands Act for the purpose of Public Recreation and Coastal Environmental Protection. This must be a primary consideration that guides future management. Specifically,

- Use of the parks must be consistent with the public purpose for which the land is reserved (so, for example, a housing development would not be allowed).
- Improvements and developments are confined to those which support, or are ancillary to, public recreation or coastal environmental protection.
- The land must be open to the public generally as a right. The public may only be restricted from access to parts of the reserve and buildings thereon, if exclusion is necessary for the public’s enjoyment of the reserve, eg a workshop, equipment storage or operational facilities

- Right of access does not mean entirely free access. Reasonable entry fees and charges (eg, to swimming pools) may be imposed as well as other legal constraints to entry, such as those relating to health and safety.

Community Values

O'Hara Head Reserve is a community resource that is freely accessible for recreation, relaxation, enjoyment and exercise by all Shoalhaven residents and visitors. The community clearly places the highest value on the natural environment, unspoilt beauty and undeveloped nature of the reserve.

The reserve provides spectacular, open views of the beautiful coastal scenery, with blue sea and sky, golden sand, embracing headlands and nearby Belowla and Brush Islands. Dolphins and whales are frequently seen from the reserve.

The natural assets of the reserve include trees that remain as a remnant or regrowth of the former ecological communities that occupied the area, as well as regenerating creek bank and sand dune vegetation. The vegetation supports birds and other wildlife that the community enjoys seeing and hearing and that is valued for its intrinsic worth.

These natural landscapes contribute to the visual character and "Australian-ness" of the area. The reserve is "rustic and simple," rather than "urban and sophisticated."

The open space of the reserve provides an important interface and buffer between the residential and tourism areas and the beach. It can be a peaceful and tranquil place to visit. For much of the year the reserve has few people on it and so provides opportunities for personal reflection and solitude.

At other times the reserve is an extremely busy place and provides opportunities for positive social interactions, such as the making of new acquaintances, enjoying the company of others, or spending time with family and friends.

The reserve provides for facilities associated with use of the adjacent sea, such as the boat ramp, Royal Volunteer Coastal Patrol base and car parking. It also provides links to the past through Aboriginal sites and the remains of the former Kioloa Sawmill.

Whilst the O'Hara Head Reserve is well used by local residents; the values of the reserve extend beyond its importance as a "local" resource. It is an important tourist destination of the Shoalhaven and is of state significance as drawcard for holidaymakers.

3.3 Ecologically Sustainable Development

Ecologically sustainable development (ESD) is one of the core duties of NSW Councils, with requirements in a number of Acts and policies (such as the Local Government Act and the NSW Coastal Policy) that link ESD to Council's activities. ESD aims to balance economic, environmental and social needs, thereby assisting in evaluation of competing requirements when making decisions. ESD can be achieved through the implementation of the following principles and programs:

- a. the precautionary principle – namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation,
- b. inter-generational equity – namely, that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations,
- c. conservation of biological diversity and ecological integrity – namely that conservation of biological diversity and ecological integrity should be a fundamental consideration,
- d. improved valuation, pricing and incentive mechanisms – namely that the environmental factors should be included in the valuation of assets and services, such as:
 - (i) polluter pays – that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
 - (ii) the users of goods and services should pay prices based on the full cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
 - (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximize benefits and minimize costs to develop their own solutions and responses to environmental problems.

3.4 Management Objectives

To protect the identified values of the reserve and comply with legislative and policy requirements, Council will aim to meet the following management objectives.

- 1) To provide for a range of recreational activities and ancillary uses of the reserve and to balance potentially competing uses in order to enhance local residents' and visitors' recreational experiences in the reserve and to aid enjoyment of the adjacent beaches and sea.
- 2) To protect and enhance the visual character of the reserve, including the views of O'Hara Head and the sea, by sensitive environmental design.
- 3) To protect and enhance the natural values of the reserve and to incorporate principles of ecologically sustainable development into design and management solutions.
- 4) To protect and interpret cultural heritage values of the reserve, both Aboriginal and European.
- 5) To minimise physical and health risks to users of the reserve.

4 Issues

A number of issues that impact on the values of the reserve were identified during the preparation of this plan. This section of the plan discusses some of the main issues that need to be dealt with in order to achieve the objectives set out in the Basis for Management section of the plan (section 3). The ways that Council proposes to deal with the issues in this section are then set out in subsequent sections (5 and 6).

4.1 Royal Volunteer Coastal Patrol Kioloa Division (RVCP)

The RVCP Kioloa was founded in 1992 and serves as a vital link in the chain of communication along the coast, monitoring vessels in transit at sea as well as locally launched vessels. The RVCP Kioloa is accredited by the State Rescue Board and operates a radio base and a rescue lifeboat which is capable of quick response to distress calls. They also provide other community services, including the provision of fishing licences.

The RVCP is housed in a Council owned building that also contains a public amenities block (Figure 10). A lease agreement between Council and the Coastal Patrol is being negotiated. The building was originally built using local community funds and resources, together with funding from Council. The path to the amenities block and the driveway to the boat shed were improved by Council in 2003.

The RVCP has upgraded their rescue lifeboat to conform to government legislation. The new vessel is bigger than the previous vessel and the space provided in the building is not large enough for easy handling. The tow vehicle (a tractor) is garaged at a private residence some distance away and this could cause delays in deployment of the rescue vessel in case of an emergency outside the hours that the base is normally open.

To obtain better value from the existing building, and to ease the boat parking problem, a concept plan has been developed that would involve a minor expansion of the existing building rather than provision of an additional building to garage the boat and tractor.

The RVCP has not been in a position financially to proceed with the project to date. A development application for the project can be submitted when adequate resources are available.



Figure 10. The Royal Volunteer Coastal Patrol base and public amenities building. The boat ramp is on the left. Concrete remains of the former sawmill are located on the beach.

4.2 Walks and Pedestrian Access

The O'Hara Head Reserve is an important place to enjoy walking and it also provides pedestrian access to the beach and rocky foreshores. In addition to providing a great local resource for short walks, walking tracks in the reserve can act as a starting point, a stopping off point and a finishing point for longer walks. These longer walks include connections to walking tracks on Meroo National Park and Murramarang National Park that make up the Murramarang Coast Walk.

Many people like to walk from the residential parts of Kioloa to the southern end of Kioloa Beach via Scerri Drive and the boat ramp access road. This is dealt with in detail in section 4.3.

People also gain access to the northern and central parts of Kioloa Beach via the public reserve around the Kioloa Beach Holiday Park. This is dealt with further in section 4.16 and Appendix 4.

There is an important pedestrian link from Boomer Crescent through to the Merry Beach car park and caravan park.

An opportunity for a potential future pedestrian link from Brace Close and nearby residential areas, through the bushland to the beach is provided by the addition to the reserve of Crown land west of Merry Beach (Lots 105 and 127 DP 755941).

Existing walking tracks on O'Hara Head (Figure 11) are generally informal in nature and have developed in an ad hoc manner. For example, some of the walking tracks on O'Hara Head used to be four wheel drive tracks prior to vehicles being prohibited on the headland and beaches. On the southern side of O'Hara Head the existing tracks cover some rough, rocky terrain and the ground there is often very wet in places. The tracks here are hard to find in places as they move on and off rocks and vegetation.



Figure 11. As well as walks by the sea, there are attractive bushland walks on O'Hara Head.

To improve safety and reduce environmental damage, this plan proposes that the walking tracks on the headland be rationalised to those shown in Figure 12. There would be three main tracks on the headland – one that follows the coast and two “shortcuts” across the headland (both existing).

Effective management of walking track safety within Council managed reserves requires a balance between the provision of graded challenges and the removal of potential hazards. Analysis suggests that in some instances modification to the environment or elimination of the hazard may be required.

Potential hazards and reduction in environmental damage can be minimised in a number of ways, such as:

- signage;
- track diversion away from the identified hazard or damage;
- fencing an identified hazard;
- provision of a structure over/around an identified hazard or sensitive area (i.e. boardwalk, bridge, etc) in compliance with Australian Standards;
- track surface maintenance;
- closure of tracks with an unacceptable identified hazard and/or unacceptable effect on an environmentally sensitive area.

On O'Hara Head there is no need for any major track construction works. Unless the amount of traffic (pedestrian and other, eg mountain bike) greatly increases the tracks should continue to be maintained as a low key facility. There is a need for some indicators to show preferred routes, closure of some sidetracks and a maintenance strategy that could involve Council staff and bushcare volunteers. This can be done progressively, with adequate warnings provided to visitors about the hazards of continuing beyond formalised sections of track.

Work has already been done to a short section of track to the north of the Coastal Patrol building.

At the end of Panamuna Place, there appear to be regularly used tracks that cross on to private property. Any improvements to that part of the reserve should be preceded by a survey to identify the locations of property boundaries.

Appropriate consideration will be given to the needs of people with disabilities when developing pathways but it will not be possible to provide a fully accessible walking track on the headland. At the boat ramp car park, a pedestrian ramp to the beach was recently installed providing some access for people with disabilities. It was not feasible to have it comply fully with the Australian Standard on Design for Access and Mobility without extending too far on to the beach and coastal hazard area. However, there is already better access at the boat ramp itself with informal sloping access points.

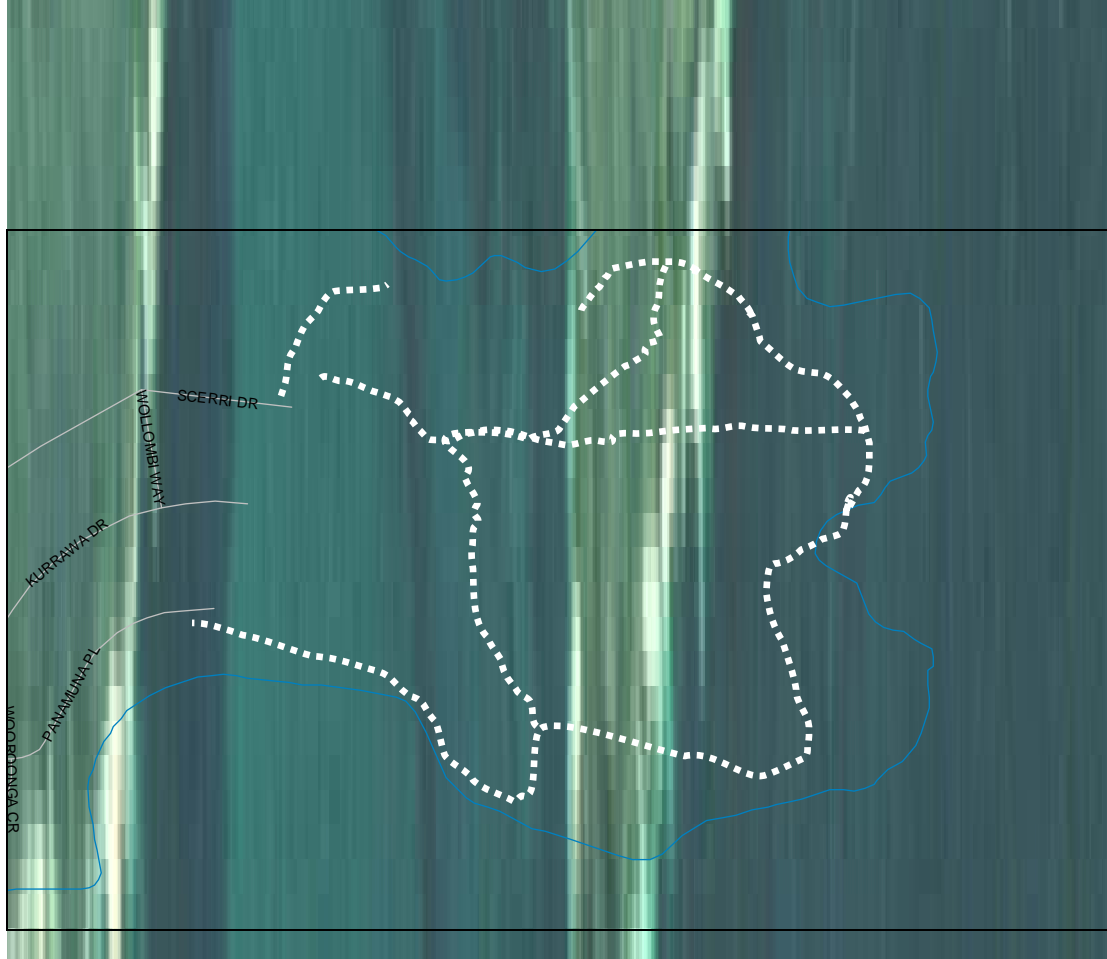


Figure 12. Approximate locations of proposed walking tracks on O'Hara Head.

4.3 The Boat Ramp, Car Park and Access from Scerri Drive

The Kioloa boat ramp (Figures 13 and 14) is used by:

- commercial fishers and abalone divers
- those doing environmental and regulatory inspections of the coastline and nearby islands
- local and visiting recreational fishers and other boaters
- sea rescue craft.

The Kioloa boat ramp has strategic importance as the main ocean launching and retrieval site between Ulladulla and Batemans Bay. In 2000, more than \$110,000 (50% Council, 50% NSW Government) was spent on improvements to the ramp, including extension of the break water.

The boat ramp and adjacent beach have also been popular places for snorkellers, SCUBA divers and swimmers to enter and leave the water (Figure 15). People also fish from the breakwater that is beside the ramp. The conflicts between the activities can create hazards to both the people in the water or on the breakwater and to boaters who may have to avoid them. Council has erected signs near most of its boat ramps to indicate that swimming is not permitted within fifty metres of the ramps. It is also possible for the Coastal Patrol personnel to monitor the area around the ramp and warn incoming boats of any persons who are in the water in the vicinity of the ramp. It is nevertheless imperative that skippers of boats take all due care to avoid people that may be in the water near the ramp or over nearby reefs and sandy areas, by travelling at a safe speed and keeping an adequate lookout.

Safety on the boat ramp access road is one of the most important issues identified through the community consultation process for the O'Hara Head Reserve Plan of Management. It is a matter that has been considered by the Shoalhaven Traffic Committee in November 2000 and April 2004. There is concern in the community about dangers arising from pedestrian/vehicle and vehicle/vehicle conflict on the boat ramp access road during busy times.

There are a number of factors that have contributed to this, including:

- inappropriate parking by vehicles and trailers, narrowing the amount of road available for moving vehicles and pedestrians,
- lack of footpaths resulting in pedestrians, including people with babies in strollers and children on bicycles, walking on the road; the road is also an important pedestrian route for people who park their boat trailers on Scerri Drive and then walk back to the boat ramp and vice versa.
- inappropriate driver behaviour including driving at inappropriate speed,
- the access road has two "blind" curves and
- vegetation encroachment.

Figures 16 and 17 illustrate most of these problems.

The distance between the two blind curves is approximately 100 metres and the overall distance from Scerri Drive to the start of the car parking area is less than 200 metres.

In 2000 Council resolved that a signage and road widening strategy be formulated and in the interim vegetation maintenance be undertaken on the inside bend located nearest the boat ramp. No stopping signs were installed on the western side of the road in 2004.

The photograph in Figure 17 was taken in 2004 before the installation of the no stopping signs. However, community feed-back received since installation of the No Stopping signs indicates that:

- some people still park on certain sections of the road, despite the signs,
- with less vehicles parked on the sides of the road some drivers travel faster,
- the blind corners are still problematic and
- there is dissatisfaction with the loss of parking near the ramp.

In October 2004 a community newsletter (Appendix 3) on this issue was distributed throughout the village and to non-resident Kioloa ratepayers and then in December 2004 a section of pedestrian path was built from Scerri Drive through the adjacent vegetation to part way down the access road. It had been intended to build the path all the way to the newly constructed beach accessway but a number of constraints prevented that.



Figure 13. The boat ramp is often a quiet place



Figure 14. ...but it gets busy!



Figure 15. Boats and swimmers.



Figure 16. Kids on bikes and in strollers on the access road.



Figure 17. Cars travelling in both directions some with boats in tow, pedestrians and kids on bikes (look closely).

To improve pedestrian access to the beach at Kioloa and improve the safety of the boat ramp access road, it is proposed that the following package of actions will be carried out. These are illustrated in Figure 18.

1. Complete the pedestrian path from Scerri Drive to the beach accessway and car park. The additional section of path would be beside the road shoulder and guide posts would be installed between it and the road.
2. Install simple speed humps both sides of both bends. Various speed limits have been suggested in the past but it is considered that with the installation of speed humps a change to the existing limit (50 kph) would not be necessary. A change to speed limit without speed humps is not likely to be as effective, particularly as the area is not likely to be a high priority for regular enforcement activities.
3. Prior to busy periods, undertake careful and selective vegetation trimming on both sides of the access road and within the car park area if necessary.
4. Reinstate some parking on the western side of the access road, to the south of where the pedestrian path comes up onto the road shoulder area.
5. Investigate increasing the amount of car and trailer parking.

During peak periods there are more cars with boat trailers than there are parking spaces available in the car park and so people park in the

surrounding streets (Scerri Drive). However, this is characteristic of boat ramps throughout the City. With such large changes in the size of the population from quiet times to peak periods, Council seeks to provide the best level of service possible within financial constraints, but the cost of building all facilities to a size that would cope with peak demand (but remain largely unused for the major part of the year) would be excessive.

Nevertheless, there are opportunities for improving the car and trailer parking situation. Firstly, some line marking in the existing car park would encourage effective use of available space. Secondly, now that there is a path that takes pedestrians off the southern part of the access road, it may be possible to reinstate a small amount of parking beside the road. Finally, it may be possible to augment the existing car park by about 10 - 20 cars and trailers spaces in the area indicated in Figure 18, east of the access road. Subject to detailed design, this could involve separation of traffic flow into a one way loop road. The cost has been estimated at \$75,000 to \$100,000. Whilst a new and expensive car park is not a high priority in Council's capital works program it could be included as a possible future project.

It has been suggested in the past that the area to the west of the access road could be developed as a parking area. This is not considered appropriate firstly because the northernmost part of this area is in the coastal dune system and so could be subject to coastal erosion and inundation and the more southern part of the area is low lying and subject to inundation. This area also contains more diverse and intact vegetation than the area to the east of the access road, which is regrowth consisting almost exclusively of Coast Banksia with a grassy understorey.

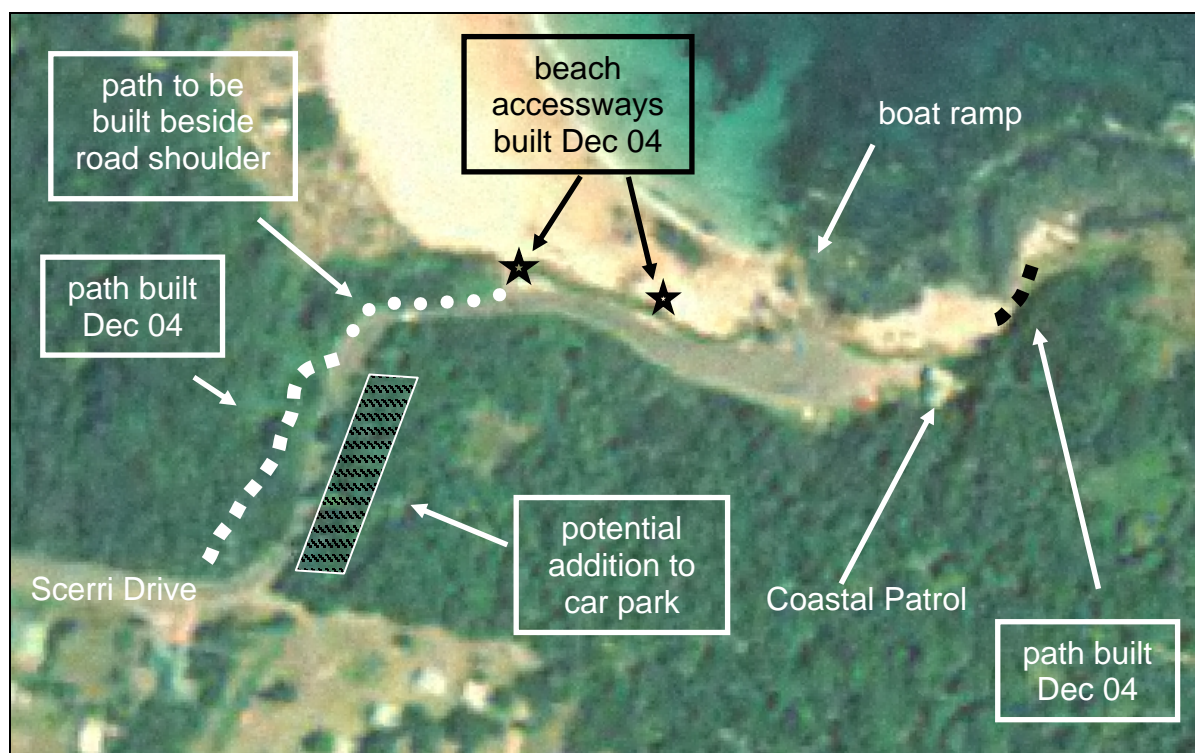


Figure 18. Proposed improvements to boat ramp car park and access road.

4.4 Reserve Character and Maintenance

The visual character of the reserve is largely determined by the natural landscapes, including the landform and local native vegetation. These natural landscapes contribute to the visual character and "Australian-ness" of the area. It is primarily these features that distinguish the reserve from coastal areas in, say, Western Australia or the Mediterranean. The reserve is "rustic and simple," rather than "urban and sophisticated." Protection of this distinguishing visual character is one of the objectives of this plan.

Council's Park Enhancement Policy (2004) sets out four levels in a hierarchy of reserve categories. These are: Icon, District, Local, Link/Buffer, with Icon Park being the highest level. In Council's Open Space Maintenance Agreement, Scerri Drive and the Kioloa boat ramp reserve are given a "Local" maintenance category. It is important that, as part of the routine maintenance of this area, that the vegetation along the sides of the boat ramp access road and car park are trimmed back when necessary. All other areas are categorised as Link/Buffer. Additions to the reserve need to be included in the Open Space Maintenance Agreement as Link/Buffer and resourced accordingly. Clear pedestrian access will need to be maintained from the Merry Beach car park to the beach.

Large sections of the reserve that are largely in a natural state will be managed as natural area under the Link/Buffer category. Fallen or cut timber in these low-use, natural foreshore areas will be made safe to ensure no risk to reserve users but will generally be left in the reserve. Whether they fall into the water or on land, their role in the provision of habitat, shelter or food is recognised.

The work that Council does on public land is complemented by work done by volunteers. Volunteers increase the extent of on-ground works in reserves, through involvement in the repair, protection and enhancement of those reserves. Council acknowledges the effort that members of the community have made in the maintenance of parks and reserves.

The work that volunteers do on reserves is covered by Council's Parkcare and Bushcare Policies. These policies help to ensure that activities do not conflict with Council policies and community expectations, and are unauthorised.

Parkcare and Bushcare volunteers can participate in a variety of activities including grass maintenance, landscape construction and maintenance, weed control, stormwater control, track and trail construction and maintenance, flora and fauna surveys, revegetation, public education, site assessment and environmental monitoring.

Volunteers that do work on Council reserves must be registered with Council. Council will ensure that registered volunteers are adequately covered for personal accident and public liability insurance.

4.5 Cultural Heritage - Aboriginal and Timber Industry

Aboriginal Heritage

The south coast and adjacent forests are significant in displaying an uncommon richness and complexity of Aboriginal cultural features. Just a few kilometres to the north of the area covered by this plan of management is the highly significant Murramarang Aboriginal Area. Aborigines in the area found a rich food resource amongst the abundant wildlife, rock platforms and reefs. The wide distribution of Aboriginal traces such as shell middens and widely distributed silcrete flakes suggest that such features could be present almost anywhere on O'Hara Head and surrounds. The National Parks and Wildlife Act 1974 protects all Aboriginal objects and Aboriginal places in NSW. Proposals that involve significant disturbance to parts of the reserve, such as the proposed additional trailer parking area, should be preceded by an archaeological survey.

Timber Industry Relics

Hamon³ has recorded a brief history of the timber industry in the Kioloa area and describes the tramlines with timber rails and sleepers used for transporting logs, the timber mill and some associated buildings.

On the foreshore to the west of the boat ramp there are concrete and steel remains of a timber mill that was last operational in the 1920s. The remains of a boiler can be seen in the bush just to the south of the car park. A mooring anchor that was used by vessels that picked up timber is on display near the Coastal Patrol building. Some steel rails were buried without disturbance under the beach access ramp that was built at the western end of the boat ramp car park in 2004. Council's draft Heritage Local Environmental Plan lists the former Kioloa Sawmill and Wharf as Heritage Items. An extract from the Shoalhaven Heritage Inventory is included in Appendix 5. The mill should therefore be entered on the Department of Lands Heritage and Conservation Register in accordance with section 170 of the Heritage Act 1977.

All parts of the former sawmill and the tramlines are protected relics and a permit under the Heritage Act 1977 is required for any activity that would disturb them.

Council has commissioned archaeological studies and the preparation of Conservation Management Plans for most heritage items elsewhere in the City for which it has management responsibility. It is appropriate that the same be done for the former sawmill at Kioloa. A potential source of funding assistance exists through the NSW Heritage Office.

³ Hamon, B. V. (1994) They Came to Murramarang. A History of Murramarang, Kioloa and Bawley Point. Centre for Resource and Environmental Studies, Australian National University.

A sign that includes photographs and some description of the sawmill has been prepared by members of the local community with assistance from Council. It is to be installed in the boat ramp area.

4.6 Potentially Contaminated Land

Land contamination is most often the result of past uses. It can arise from activities that took place on or adjacent to a site and be the result of improper chemical handling or disposal practices, or accidental spillages or leakages of chemicals during manufacturing or storage. When carrying out planning functions under the EP&A Act, a planning authority must consider the possibility that a previous land use has caused contamination of the site as well as the potential risk to health or the environment from that contamination. When an authority carries out a planning function, the history of land use needs to be considered as an indicator of potential contamination.

The Department of Planning's "Managing Land Contamination - Planning Guidelines." list wood preservation as an activity that may cause contamination. Based on this, Shoalhaven City Council has, as an initial step, identified all former timber mill sites as potentially contaminated. Lot 24, 25 and 26 in DP 755941, as the site of the former Kioloa Sawmill, are therefore identified as potentially contaminated (PCL 76), though it seems unlikely that there was treatment of timber carried out there. It appears that timber preservation did not commence in NSW until the 1930s and the Kioloa sawmill ceased operation after burning down in a bushfire in about 1926. Nevertheless, depending on the outcome of a preliminary analysis carried out by a suitably qualified person, any future development in the area may need to take into account the requirements of the Contaminated Land Management Act 1997 and State Environmental Planning Policy No 55—Remediation of Land.

4.7 Special Events

The Royal Volunteer Coastal Patrol Kioloa has held occasional events at the base and boat ramp area, such as fishing carnivals and small market days. These uses are considered appropriate and are supported by Council.

It is not uncommon for members of the public to hold marriage ceremonies on public reserves and these could be approved on the O'Hara Head Reserve. However there are more issues associated with wedding receptions than with the actual ceremonies and so Council has developed a policy for wedding receptions on public parks, which is included in Appendix 1. It sets out the criteria that are used by Council when deciding whether or not to approve an application.

To allow for coordination of activities, public safety, rubbish management, etc, for all events it is important that the reserve is formally booked through Council, as far in advance as possible. The events need to be run in a manner that minimises inconvenience caused to local residents and so that the rights of the general public to use and have access to the reserve and its facilities are respected.

At the O'Hara Head Reserve, events and activities need to be organised so that they do not preclude use of the public amenities block, beach accessways, boat ramp and car parking spaces, particularly car and trailer spaces. For example, it would not be appropriate for, say, a circus to be set up in the car park as the area needs to be kept available for those people using the boat ramp or going to the beach or headland.

As far as possible, any Council works in the reserve will be scheduled to minimise interruption to special events. Provided Council knows well in advance when events are proposed to be held, notice will be provided to event organisers of proposed works.

4.8 Vegetation Removal

Healthy foreshore vegetation communities are central to the sustainability of foreshore reserves for current and future generations of Shoalhaven residents.

Intact coastal / foreshore vegetation communities play an important role in protecting private property and public infrastructure. The extrinsic value of foreshore vegetation for wind-breaks, bank stabilisation or shade is strongly recognised by the community.

This plan also recognises the intrinsic value of foreshore vegetation, for its representation of original vegetation communities and for the protection it affords to wildlife, particularly native birds (Figure 19). If O'Hara Head is not connected by healthy native vegetation corridors to larger natural areas such as Murramarang National Park then the number and types of plants and animals that live on the headland will be greatly reduced.

Council is committed to combating the wilful destruction of vegetation on public land. There are a number of sites on the reserve at Kioloa, adjacent to residential areas, where it appears that vegetation has been removed in the past (Figure 20). Council's Foreshore Reserves Policy states that where there is irrefutable evidence of tree destruction by poisoning, cutting or other means, Council will take steps to raise awareness of the specific act of vandalism through regulatory/advisory signage. In addition, Council's Ranger Services will letter-box-drop the adjoining properties informing them of the important role of foreshore vegetation and Council's commitment to its protection, requesting information and advising of the penalties under the legislation. Attempts will also be made to raise community awareness through the media to publicise the scale of the problem in some localities.



Figure 19. Trees hollows are important for many of our native birds and mammals and there can be competition for this limited resource. These Crimson Rosellas were feeding their young in a tree hollow at Merry Beach.



Figure 20. Vandalised trees at Kioloa.

4.9 Authorised Occupancies

As discussed in section 4.1, part of the reserve is occupied by Royal Volunteer Coastal Patrol Kioloa. A lease for this occupancy is being negotiated.

There is also a Permissive Occupancy for a pumpsite, pipeline, cable and spearpoints in the dune behind Merry Beach. It is there to supply groundwater as part of the water supply for the Merry Beach Caravan Park.

The administrative process of creating a single new reserve at Kioloa means that new management arrangements may need to be negotiated for the continued use of the site in conjunction with the caravan park operation. There are some visual impacts from the current facility (see Figure 21) and these could be addressed as conditions of any new licence granted.

The facility also needs to be licensed under Part 5 of the Water Act 1912. This licensing procedure involves an assessment by the regional hydrogeologist of the Department of Natural Resources, including consideration of any possible impacts on surrounding areas, the quality of the water being extracted and the sustainability of the proposed rate of extraction.



Figure 21. Pump house at Merry Beach.

4.10 Unauthorised Encroachments

Unauthorised encroachments are considered illegal extensions of property boundaries, buildings, gardens or other features onto public land. It also

applies to the unauthorised occupation of public land through the storage of trailers, caravans, vehicles, large boats, wood piles, barbecues or any other materials. Unauthorised encroachments have the ability to alienate land from public use, pose significant environmental and/or public risk, or compromise service vehicle/emergency access, including for bushfire management.

A number of unauthorised encroachments on the O'Hara Head Reserve have been identified during the preparation of this plan. Council is committed to the removal of unauthorised encroachments on reserve areas and the Foreshore Reserves Policy sets out a process for dealing with them. This will involve Council Officers first assessing and consulting with the community about an unauthorised encroachment prior to notifying the owner of the encroachment. If the owner of the encroachment is not easily identifiable, Council will notify surrounding residents.

In the circumstance where Council has determined that an unauthorised encroachment has demonstrable community benefit, the encroachment will be registered as a Council asset.

Unauthorised encroachments which do not provide demonstrable community benefit, pose significant environmental and/or public risk, compromise service vehicle/emergency access, or conflicts with legislative and policy obligations will be removed and if required the reserve rehabilitated at the expense of the owner.

Where unauthorised encroachments are identified, officers from Council's Ranger Services are authorised to take action to resolve the matter which may include issuing an infringement notice, fine or legal action to remove the encroachment from public land and restore the area.

4.11 Bushfire mitigation

Council has a responsibility under the Rural Fires Act, 1997 to “prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on and from...any land vested in or under its control and management”. Additionally, significant natural areas need to be protected from wildfire.

Bushfire management in the Shoalhaven is undertaken according to the Bushfire Risk Management Plan adopted by the Shoalhaven District Bush Fire Management Committee in December 2000.

Bushfire mitigation activities on Council owned/managed lands are undertaken in accordance with:

- Bushfire Risk Management Plan (Shoalhaven) 2000,
- Guidelines for Asset Protection Zones, (RFS 2003),
- Planning for Bushfire Protection (RFS / DPES 2001),
- Shoalhaven LEP 1985 and
- Any Plan of Management that may cover the land.

At the time of writing this plan, Asset Protection Zones (APZs) were maintained behind properties in Brace Close (by hand with brushcutters) and Boomer Crescent (by slashing). Owners of adjoining lands do not have the right to undertake bushfire hazard reduction activities on public land without approval.

Another requirement of the legislation is that APZs must be established for any new development on bushfire prone land and should be located within the boundaries of the development. This means that no new APZs should need to be created on the reserve covered by this plan.

Isolated areas of vegetation such as riparian corridors (creek lines) and foreshore areas may not be considered a significant bushfire hazard as they are not large enough to produce fire of an intensity that will threaten dwellings. Riparian areas are generally characterised by species with relatively higher moisture content than woodland / heath species and create a humid microclimate. Foreshore areas, particularly dune systems can be more flammable as they consist of species containing volatile oils and small dry leaf structures. However, their location on the eastern seaboard and the influence of the coastal environment generally tempers the ferocity of fire in these locations. Further, the fragmented nature of these ecological systems within the urban environment lessens the ability of fire to spread. The Rural Fire Service has attempted to carry out a hazard reduction burn in the native vegetation to the north of Scerri Drive, but the moist nature of the vegetation meant that it could not be accomplished.

Any future applications for fire hazard reduction on Council managed land will be assessed by Council's Fire Mitigation Officer.

A gate has been installed in the fence adjacent to the boat ramp access road to allow for emergency vehicle access onto O'Hara Head.

4.12 Introduced Plants and Animals

Plants

There is a range of weed species present in various locations in the reserve, on both land that is currently managed by Council and land proposed to be transferred to Council. Introduced plants present in the reserve include:

- Kikuyu Grass *Pennisetum clandestinum*
- Buffalo Grass *Stenotaphrum secundatum*
- Asparagus Fern *Protasparagus aethiopicus*
- Bridal Creeper *Asparagus asparagoides*
- Blue iris *Aristea ecklonii*
- Bitou Bush *Chrysanthemoides monilifera*
- Cassia *Senna pendula*.
- Coral Tree *Erythrina x sykesii*
- Blackberry *Rubus fruticosus*
- Balsam *Impatiens* sp.

- Paddy's Lucerne *Sida rhombifolia*
- November Lily *Lilium formosum*
- Pennywort *Hydrocotyle bonariensis*
- Honeysuckle *Lonicera japonica*
- Plantain *Plantago* sp.
- Sow Thistle *Sonchus* sp.
- Cotoneaster *Cotoneaster* sp.
- English Ivy *Hedera helix*
- Panic Veldgrass *Ehrharta erecta*

The infestations are not exceptional in relation to citywide trends. However, some of the plants in the list above are serious environmental weeds that should be controlled at the O'Hara Head Reserve.

A Bushcare group has recently been established and is guided by Council's Bushcare Coordinator in weed removal and other land management activities. The group is working to an agreed action plan, which initially focuses on control of Cassia and Bridal Creeper and experimental cool winter burning of the Buffalo Grass understorey within the *Casuarina* forest (Figure 22).



Figure 22. Pretty but weedy - buffalo grass chokes out native vegetation.

Many introduced plants become established in our bushland because nearby residents have dumped their garden waste there. It is an offence to dump garden waste on public land. Council has enforcement and education programs to help reduce this antisocial and environmentally irresponsible

behaviour, as well as providing options for appropriate disposal of garden waste at a reasonable cost. At the time of writing this plan, Council provided all ratepayers with two free tip vouchers per property per year, as well as heavily subsidising a kerbside green waste collection service (\$5 for collection of a trailer load).

Animals

There are signs of rabbits on O'Hara Head. If rabbit numbers in the area become excessive then control measures such as a baiting program coordinated with the Rural Lands Protection Board and other land managers should be considered.

4.13 Dogs

There is no off-leash area for dogs in the O'Hara Head Reserve, nor are there any specific dog prohibited areas. Throughout the Shoalhaven, dogs are prohibited:

- Within 10 metres of any children's playing apparatus or food preparation/consumption areas in public areas. This does not apply if the food preparation/consumption area is a public thoroughfare and where a 10metre separation distance is not possible.
- Within the grounds of any child care centre or school without the approval of the person in charge.
- Within 200m of identified shorebird nesting sites.
- Within 200m of 'flagged' beach patrolled areas subject to site specifications for access.
- Within all Council owned/operated swimming pool complexes.

Outside Council's off-leash and dog prohibited areas, a dog may be taken onto any Council managed reserve or public place providing it is kept on-leash. This restriction does not apply to police dogs or dogs used to assist people with disabilities.

Any review of off-leash areas and dog prohibited areas is most appropriately done on a citywide or at least a regional basis, rather than on the basis of planning for individual reserves. Council has resolved that requests from towns and villages for review of dog off leash areas will be considered by Council as they are submitted from Principal Consultative Bodies and community groups. Therefore, if, as part of some future review, it is considered that part of this reserve should be included as an off-leash or dog prohibited area, then there is nothing in this plan of management that would prohibit it.

There are some dog owners that do not comply with the requirement to keep their dog on a leash when in the reserve (Figure 23). Council will ensure that signs clearly indicating that dogs are to be on-leash are maintained at appropriate locations in the reserve. Council's rangers will patrol the area from time to time and, when necessary, either attempt to educate dog owners or issue on the spot fines. Council will continue to undertake Citywide

community education on the rules that apply to dogs in public places, in the interests of promoting responsible pet ownership.

The issue of dog faeces being left in the reserve, including on the beaches, is a concern to many members of the community. Not only is this unpleasant, it is an environmental and health hazard, particularly for children. It is an offence not to remove the faeces when your dog defecates in a public place. Council has considered the option of providing bags and special bins in reserves for pet owners to use, but it is not feasible in an area that has as many reserves as the Shoalhaven. Owners are expected to carry their own bags and/or implements for collecting faeces. Council will continue to undertake community education on this issue.



Figure 23. Dog off leash.

4.14 Commercial Use Opportunities

Apart from the occasional small market held at the Coastal Patrol, there are currently no commercial facilities available within the reserve. It is about one kilometre from the boat ramp to the nearest shop. From time to time, Council is approached by individuals or groups to allow commercial activities on land that it manages. The following discussion will help guide decisions, if, at some time in the future, such a request is made for the O'Hara Head Reserve.

Any commercial facility must be consistent with the reservation of public recreation and provide a service to the users of the reserve. Potential commercial use opportunities may include small scale food and beverage

outlets or other outlets, such as rental or sale of beach equipment, bait, etc. Such commercial enterprises may also be beneficial to the management of the reserve in that operators may be able to assist in the maintenance of portions of the site. However it would be inappropriate for additional large or visually intrusive buildings to form the basis of such a use.

Any proposed new commercial use of the O'Hara Head Reserve would require approval of the Minister administering the Crown Lands Act and the relevant Council approvals and permits. The NSW Government's current Policy on Food and Beverage Outlets on Crown Reserves sets out the types of such outlets that might be suitable for establishment on reserves.

4.15 Coastal Dune System and Coastal Hazards

The main hazards from coastal processes in the reserve area are:

- short-term coastal erosion including that resulting from severe storms, the behaviour of creek entrances and slope instability;
- long term coastline recession including that resulting from sand transport by wind and climate change; and
- oceanic inundation of low lying areas.

In 2004, Council commissioned the Snowy Mountains Engineering Corporation (SMEC) to prepare a citywide Coastline Risk Management Report that addresses risks from identified hazards.

For Kioloa Beach it was concluded that the beach does not appear to be experiencing long term recession. However, modelling indicated that the 1% event would result in oceanic inundation to a height of 4.4m AHD (AHD is approximately mean sea level). With a Greenhouse sea level rise the inundation level would increase to 4.7m AHD.

For Merry Beach there was no indication that the beach is eroding. The beach is deeply embayed with some protection from Snapper and O'Hara Heads and there is a healthy foredune with the previously cleared vegetation now regenerating. The 4 m AHD contour lies about 200 m inland with a berm at around 2 m AHD that is some 60 m wide.

Modelling for Merry Beach indicated that over the relatively flat foreshore beach profile (around 1:40), extreme water level and wave runup during a 1% event would reach 4.7 m AHD. In the longer term, with a Greenhouse sea level rise, this runup level would reach around 5.0 m AHD in 2100.

There is therefore some threat of inundation of assets in the low lying parts of the reserve behind both beaches. It is important to take this into account when siting and designing any new facilities. The pumphouse and spearpoints on the reserve that belong at Merry Beach Caravan Park could be damaged in a large storm.

There has been some concern about erosion of the shoreline near the Coastal Patrol building. The building itself is about six metres from the shoreline and in rough weather water has lapped the garden bed wall at the base of the building. The erosion will be monitored and appropriate works undertaken when considered necessary. This illustrates the importance of setting infrastructure (such as any addition to the boat ramp car park) well back from coastal hazard zones.

It is also important that healthy dune vegetation is allowed to re-establish at both beaches, to reduce loss of sand from storm bite and wind erosion.

4.16 Native Title

The introduction of the Commonwealth Native Title legislation in 1993 recognised the existence of native title and made provision for Aboriginal and Torres Strait Islanders to lodge claims over Crown land. The legislation also sets out the requirements for the Crown and appointed Crown reserve trusts in dealing with Crown land in the future unless it can be clearly established that any native title rights and interests that may have existed have been extinguished.

Native title may have been extinguished over parts or the whole of this Crown reserve by the construction of authorised public works or by lawful use of the land that is wholly inconsistent with the continuation of native title rights and interests. It is the responsibility of the Trust to ensure that, prior to any works being undertaken in accordance with the Plan of Management, the issue of native title is addressed.

At the time of writing this plan, the reserve was not the subject of a Native Title Claim under Commonwealth legislation, nor was it the subject of an Aboriginal Land Claim under NSW legislation. Some areas had been the subjects of Aboriginal Land Claims which were withdrawn on 30 October 1986.

4.17 Adjoining Public Land

While they are not formally included as part of the land covered by this plan of management, there are a number of nearby reserves that are discussed in this section because they interact with the reserve covered by this plan. For example, they may be continuous with the reserve covered by the plan or may provide additional nearby resources for recreation or provide access links.

4.17.1 Crown Reserves at Kioloa Beach and Merry Beach

The area occupied by the Kioloa Beach Holiday Park is leased from the NSW Government (area 1 in Figure 2). It is part of Crown reserve R96797 for Public Recreation. The land to the east and north of the holiday park (area 2 in Figure 2), outside the fenced area of the holiday park, makes up the rest of reserve R96797. It is managed by the holiday park operator under a licence from the NSW Government, but it is used by the general community for recreation, parking and access to the beach. It has important coastal

vegetation and, near Butlers Creek, some spotted gum forest. The current holiday park operator has made significant improvements to the management of the area. For example, the sewage effluent that is disposed of to trenches in this area has been greatly improved in quality by construction of a new treatment facility in the holiday park. It has also been reduced in volume by effluent reuse. There have also been improvements to native vegetation management. Appendix 4 contains some more detailed information on the management of this area.

At Merry Beach, Crown reserve R87414 for Public Recreation and Access occupies the creek line east of the intersection of Pretty Beach Road and Northwood Drive (area 15 in Figure 2). It lies between the area leased from the NSW Government for the Merry Beach Caravan Park and the area licensed to them by the Government for effluent disposal. The reserve could provide an important route for pedestrian access from the western residential areas to Merry Beach. It also has environmental values associated with the creek and native vegetation. There are conditions relating to the management of this area in the development consent for the upgraded sewage treatment system that was recently installed for the caravan park.

Council has not carried out maintenance of the above reserves at Kioloa Beach and Merry Beach in the past. However, the Department of Lands has approached Council about being appointed as Trust Manager for both of these reserves. Under this proposal, the Department of Lands would continue to have management responsibility for leased areas that are occupied by the van parks.

At the community workshop held as part of the process for development of this plan of management, the community were asked who they thought should manage the reserves and why. Some people thought that the Kioloa Beach Holiday Park should continue to manage (care take) its area (outside fence) as is, while others thought that the area should be managed by Council, provided it is maintained to current or better standards than existing.

In the first place, it is recommended that the Department of Lands review and, if necessary, enforce the conditions of the leases for the van parks as they relate to the adjacent reserve areas, and negotiate appropriate licences to the van park operators for their uses and maintenance of the reserves. Such licence negotiations could include requirements that the owners of the parks prepare and implement separate management plans for the licensed land. For Council to consider accepting management responsibility for the area outside the van park, the standard of the reserve would need to have reached an acceptable level in terms of public access, coastal dune protection, native vegetation protection, creek bank protection and revegetation, etc.

4.17.2 Council Owned Land

There are several parcels of Council owned community land that are contiguous with the land covered by this plan of management. These are areas 8, 9, 10, 11 and 16 on Figure 2. Areas 8, 9, 10 and 11 are near

Panamuna Place, Wooroonga Crescent and Boomer Crescent. There is also a small reserve in Brace Close (area 16 in Figure 2).

These areas are managed in accordance with Council's generic Natural Areas and Parks Plans of Management, and the provisions of the Local Government Act, in particular the core objectives that are set out below. Areas 8, 10 and 11 are categorised under the act as Natural Area Bushland and area 9 is categorised as Natural Area Foreshore. The reserve in Brace Close is categorised as Park. The management issues on these reserves are not greatly different to many covered in this plan of management, especially in relation to bushfire mitigation, vegetation removal, unauthorised encroachments and reserve maintenance. The reserves provide important links between the residential areas and the area covered by this plan of management. They should therefore be managed in a similar way as the land covered by this plan of management.

Core Objectives for Management of Community Land

The core objectives for management of community land categorised as a **natural area**, set out in section 36E of the Local Government Act, are:

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

The core objectives for management of community land categorised as **bushland**, set out in section 36J of the Local Government Act, are:

- a) to ensure the ongoing ecological viability of the land by protecting the ecological biodiversity and habitat values of the land, the flora and fauna (including invertebrates, fungi and micro-organisms) of the land and other ecological values of the land, and
- b) to protect the aesthetic, heritage, recreational, educational and scientific values of the land, and
- c) to promote the management of the land in a manner that protects and enhances the values and quality of the land and facilitates public enjoyment of the land, and to implement measures directed to minimising or mitigating any disturbance caused by human intrusion, and

- d) to restore degraded bushland, and
- e) to protect existing landforms such as natural drainage lines, watercourses and foreshores, and
- f) to retain bushland in parcels of a size and configuration that will enable the existing plant and animal communities to survive in the long term, and
- g) to protect bushland as a natural stabiliser of the soil surface.

The core objectives for management of community land categorised as **foreshore**, set out in section 36N of the Local Government Act, are:

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

The core objectives for management of community land categorised as a **park**, set out in section 36G of the Local Government Act, are:

- a) to encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities, and
- b) to provide for passive recreational activities or pastimes and for the casual playing of games, and
- c) to improve the land in such a way as to promote and facilitate its use to achieve the other core objectives for its management.

5 Permissible & Prohibited Uses

There are two principal processes that determine what can and cannot be approved in the reserve. The first is that some uses of the reserve require specific approval from Council in the form of development consent under the Environmental Planning and Assessment (EP&A) Act 1979. Secondly, some uses of the reserve require a lease, licence or temporary licence under the Crown Lands Act 1989 or the Local Government Act 1993. Use of the reserve must be consistent with the public purpose for which the land is reserved under the Crown Lands Act, i.e., public recreation and coastal environmental protection.

Under the EP&A Act, the permissible uses are primarily determined by the land use zoning specified in Council's Local Environmental Plan. Most of the reserve is zoned 6 (a) (Open Space – Recreation). The following clauses from Council's Local Environmental Plan set out the objectives of the zone and what types of development could be considered for the reserve. This plan of management refines what types of developments Council may consider for the reserve.

Zone No. 6 (a) (Open Space – Recreation "A" (Existing) Zone)

1. Objectives of zone

The objectives are to identify land where existing recreation facilities for the general use of the community are provided.

2. Without development consent

Nil.

3. Only with development consent

Agriculture; buildings for the purposes of landscaping, gardening or bush fire hazard reduction; caravan parks; community facilities; drainage; drill grounds; forestry; racecourses; roads; showgrounds; sports grounds; uses or buildings associated with those purposes which are under the care, control and management of the council; utility installations (other than gas holders or generating works).

4. Prohibited

Any purpose other than a purpose for which development may be carried out only with development consent.

Notwithstanding the above provisions, under section 54C of the local environmental plan, development consent is not required for:

- (a) the erection or installation of bins, bus shelters, fencing, lighting (excluding of sportsgrounds), minor shelters, park and street furniture, seats or viewing platforms (not exceeding 25m² in area); or
 - (b) the erection in public parks, recreation areas and reserves of barbeques, buildings or structures for the purpose of bridges, boardwalks or staircases, picnic tables or playground equipment; or
 - (c) the erection or installation of goal posts, sight screens and similar ancillary sporting structures on sporting or playing facilities (excluding grandstands, dressing sheds and the like); or
 - (d) the construction of pedestrian paths and cycleways; or
 - (e) the erection or installation of signs (including name, directional, interpretive and regulatory warning signs in parks, foreshores and natural areas),
- by or on behalf of the Council.

Further, under Clause 39C, Council can approve temporary uses, such as weddings:

39C Temporary use of land

- 1) Notwithstanding any other provision of this plan, the Council may grant consent to the temporary use of any land for any purpose (not being designated development or development prohibited by the provisions of any other environmental planning instrument applying to the land) for a maximum period of 28 days (whether or not the days are consecutive) in any one year.
- 2) In determining whether to grant consent as referred to in subclause (1), the Council shall take into consideration:
 - a) the protection of the environment and the amenity of the locality during and immediately after the carrying out of the proposed use;
 - b) whether appropriate arrangements will be made for the provision of utility services, vehicular and pedestrian access, parking and restoration of the site to the condition prevailing immediately before the carrying out of the proposed use; and
 - c) whether the period for the carrying out of the proposed use is reasonable in the circumstances or whether a lesser period would be more appropriate.

Temporary licences for specific, short term uses may be granted under section 108 of the Crown Lands Act 1989 and clause 32 of the Crown Lands Regulation 2000. Unless it is revoked sooner or is granted for a shorter period, a temporary licence ceases to have effect one year after it is granted.

Set out below are those purposes for which Council will consider applications for the granting of a temporary licence in the O'Hara Head Reserve. Any application will be considered in terms of its impacts on the reserve and on other recreational uses of the reserve and, if approved, will require rehabilitation of the reserve at the conclusion of the activity.

Purposes for which granting of a temporary licence may be considered:

- | | |
|--|---|
| • Advertising | • Markets |
| • Camping using a tent, caravan or otherwise | • Meetings |
| • Catering | • Mooring of boats to wharves or other structures |
| • Entertainments | • Sales |
| • Equestrian events | • Shows |
| • Exhibitions | • Sporting and organised recreational activities |
| • Filming | • Stabling of horses |
| • Functions | |
| • Hiring of equipment | |

Purposes for which a temporary licence will not be granted:

- | | |
|-----------|-------------------------|
| • Grazing | • Holiday accommodation |
|-----------|-------------------------|

Other activities would require a longer term licence or a lease.

There are a number of other activities that, under the Crown Lands Act and Regulation and the Local Government Act, must not be carried out on the reserve without lawful authority. These include:

- living there,
- building any structures or putting up signs,
- littering or dumping any material there (including garden waste),
- driving a vehicle or trail bike (other than on designated car parks and access roads),
- damaging or taking away plants, animals, soil or rocks,
- lighting fires (except in barbecues),
- carrying or using firearms or other weapons, and
- throwing stones or other dangerous objects.

6 Action Plan

This section of the plan sets out the way in which Council proposes to develop and manage the reserve in the future. Works have been devised to improve the reserve, to repair past damage and to prevent further degradation of the reserve.

The Action Plan set out in the following tables includes detailed management strategies and associated actions by which the management objectives will be achieved.

Improvement of the reserve could take place progressively over a number of years. There are some high priority and relatively inexpensive works that could be done in the short term. This includes completion of the pedestrian path from Scerri Drive to the southern end of Kioloa Beach. Other actions will need to compete with projects across the City for funding under reserve management budgets or for inclusion in Council's capital works program, or be funded through external grants. Some items, such as the construction of additional trailer parking, will be long term redevelopment options that could be carried out when funds are available or when existing infrastructure is failing and in need of replacement. High priority actions are flagged in the tables.

<p><i>Objective 1. To provide for a range of recreational activities and ancillary uses of the reserve and to balance potentially competing uses in order to enhance local residents' and visitors' recreational experiences in the reserve, and to aid enjoyment of the adjacent beaches and sea</i></p>	
<i>Strategy</i>	<i>Action</i>
1.0 Plan for the future open space needs of the community	1.0.1 As the surrounding residential land becomes more fully developed, consider the need to include a children's playground on Brace Close Reserve (area 16).
	1.0.2 As the surrounding residential land becomes more fully developed, consider the need to provide future open parkland, possibly by clearing areas 13 and 14 or on the adjacent cleared land that is zoned for residential use, but not yet subdivided."
1.1 Provide for pedestrian links within the reserve to service movement to and from nearby centres of activity, including the residential areas and the beach	1.1.1 Construct safe path linking Scerri Drive with the boat ramp car parking area and the southern end of Kioloa Beach High Priority
	1.1.2 Maintain pedestrian accessways from the car parks at the southern end of Kioloa Beach and at Merry Beach
	1.1.3 Consider a potential future pedestrian link from Brace Close to Merry Beach
	1.1.4 When next reviewing the Shoalhaven Local Environmental Plan, consider rezoning lot 127 DP 755941 to 6(a) (Open Space - Recreation "A")
1.2 Progressively develop a low key walking track system on O'Hara Head	1.2.1 Simplify and rationalise the existing track system
	1.2.2 Install appropriate signage
	1.2.3 If necessary, carry out track works for environmental protection and public safety High Priority
1.3 Accommodate continued operation of the Royal Volunteer Coastal Patrol Kioloa	1.3.1 Finalise negotiation of a lease agreement and, if required, a licence for RVCP's occupation and use of the reserve High Priority

<p><i>Objective 1. To provide for a range of recreational activities and ancillary uses of the reserve and to balance potentially competing uses in order to enhance local residents' and visitors' recreational experiences in the reserve, and to aid enjoyment of the adjacent beaches and sea</i></p>	
<i>Strategy</i>	<i>Action</i>
	1.3.2 Assist with RVCP's preparation of a development application for minor expansion of the existing building to better accommodate the rescue boat and tow vehicle
1.4 Accommodate the holding of appropriate special events in the parks	1.4.1 Consider applications for booking of the reserve for special events
	1.4.2 Ensure that events are run in a manner that minimises inconvenience to nearby residents and the general public
	1.4.3 Ensure that special events do not preclude the use of the public amenities block, beach accessways, boat ramp, car and trailer parking spaces.
	1.4.4 As far as possible, schedule Council works in the reserve so that disruption to special events booked well in advance is minimised
1.5 Improve the parking situation at the boat ramp during peak periods	1.5.1 Consider line marking in the existing car park
	1.5.2 Investigate reinstating parking adjacent to parts of the access road High Priority
	1.5.3 Investigate adding a new section to the car park
1.6 Allow for the establishment of small scale commercial uses of the reserve that are compatible with public recreation and coastal environmental protection	1.6.1 Ensure that any potential outlet meets the requirements of the Crown reserve Food and Beverage policy and the relevant Council and NSW Government approvals and permits
	1.6.2 Do not approve commercial activities if they involve building of large permanent structures or significant damage to native vegetation
	1.6.3 Review licence for water extraction at Merry Beach
1.7 Maintain the reserve to appropriate standards	1.7.1 Maintain the reserve in accordance with Council's Park

<p><i>Objective 1. To provide for a range of recreational activities and ancillary uses of the reserve and to balance potentially competing uses in order to enhance local residents' and visitors' recreational experiences in the reserve, and to aid enjoyment of the adjacent beaches and sea</i></p>	
<i>Strategy</i>	<i>Action</i>
	Enhancement Policy and Open Space Maintenance Agreement, generally as 'Link/Buffer,' with some small areas, such as the boat ramp area, as 'Local' High Priority
	1.7.2 Encourage and support assistance from Parkcare and Bushcare volunteers
1.8 Ensure all occupancies are authorised	1.8.1 Assess unauthorised encroachments according to the procedure in Council's Foreshore Reserves Policy High Priority
	1.8.2 Remove encroachments that do not provide demonstrable community benefit, pose significant environmental and/or public risk, compromise service vehicle/ emergency access, or conflict with legislative or policy obligations
	1.8.3 Department of Lands review and, if necessary, enforce the conditions of the leases for the nearby caravan parks as they relate to the adjacent reserve areas (Crown reserves 96797 & 87414) High Priority
	1.8.4 Department of Lands negotiate appropriate licences to the caravan park operators for their uses and maintenance of the reserves; such licence negotiations could include requirements that the owners of the parks prepare and implement separate management plans for the licensed land High Priority
	1.8.5 Council reconsider taking on management responsibility for the reserves adjacent to the nearby caravan parks if the standard of the reserve reaches an acceptable level in terms of public access, coastal dune protection, native vegetation protection, revegetation and creek bank protection, etc.

<i><u>Objective 2.</u> To protect and enhance the visual character of the reserve, including the views of O'Hara Head and the sea, by sensitive environmental design</i>	
<i>Strategy</i>	<i>Action</i>
2.1 Protect and enhance the distinguishing visual character of the reserve	2.1.1 Use local native trees, shrubs and grasses in any landscaping
	2.1.2 Maintain the area as 'rustic and simple' rather than 'urban and sophisticated' High Priority
	2.1.3 Design and position structures (such as signs, fences, etc) to minimise impacts on views from the beach, roads and walking tracks

<i><u>Objective 3.</u> To protect and enhance the natural values of the reserve and to incorporate principles of ecologically sustainable development into design and management solutions</i>	
<i>Strategy</i>	<i>Action</i>
3.1 Protect and enhance remnant and regrowth native vegetation in the reserve	3.1.1 Encourage and support bushcare group to continue removing weeds from the reserve High Priority
	3.1.2 Manage most of the reserve as 'natural area'
	3.1.3 Monitor natural regeneration of native vegetation on the dune at Merry Beach, and if considered necessary, enhance regeneration by appropriate means
	3.1.4 Undertake education and enforcement activities to reduce dumping of garden waste and other rubbish in the reserve, and unauthorised vegetation removal
3.2 Control pest animals	3.2.1 If pest animal numbers (eg, rabbits, feral cats) become excessive undertake coordinated control activities with neighbouring land managers
3.3 Provide visitors to the reserve with opportunities to understand the nature of the place	3.3.1 Include visually unobtrusive interpretive information at appropriate points in the reserve

<i><u>Objective 4.</u> To protect and interpret cultural heritage values of the reserve, both prehistoric Aboriginal and historical</i>	
<i>Strategy</i>	<i>Action</i>
4.1 Protect Aboriginal and historical heritage	4.1.1 Assess sites for relics before undertaking activities that have potential to disturb High Priority
	4.1.2 Consider native title status of land before undertaking significant new works
	4.1.3 Seek funding for archaeological study and preparation of conservation management plan for the former sawmill
4.2 Provide visitors to the reserve with opportunities to understand the cultural heritage of the place	4.2.1 Include interpretive sign at the remains of the former sawmill High Priority

<i><u>Objective 5. To minimise physical and health risks to users of the reserve</u></i>	
<i>Strategy</i>	<i>Action</i>
5.1 Improve safety of the boat ramp access road	5.1.1 Construct safe path linking Scerri Drive with the boat ramp car parking area and the southern end of Kioloa Beach High Priority
	5.1.2 Install speed humps near the bends
	5.1.3 Prior to busy periods, undertake careful and selective vegetation trimming on both sides of the access road, as required High Priority
5.2 Reduce risks associated with coastal hazards	5.2.1 Ensure location and design of structures take into account threats from coastal hazards
	5.2.2 Monitor erosion near the RVCP and carry out appropriate works when necessary
	5.2.3 Protect and reinforce dune vegetation to help protect the dune itself from erosion
5.3 Reduce risks associated with bushfire hazards	5.3.1 Undertake bushfire mitigation activities in accordance with legal and policy requirements High Priority
5.4 Reduce risks associated with physical and chemical hazards	5.4.1 Remove remains of septic tanks from land behind Merry Beach
	5.4.2 Undertake a preliminary analysis (carried out by a suitably qualified person) of the potential for the sawmill site to have been used for timber preservation. If necessary, ensure that any future development in the area takes into account the requirements of the Contaminated Land Management Act 1997 and State Environmental Planning Policy No 55– Remediation of Land
5.5 Warn visitors to the reserve of potential hazards	5.5.1 Maintain appropriate signs at accessways and track heads
5.6 Reduce risks associated with dogs in the reserve	5.6.1 Maintain appropriate signs at accessways and track heads
	5.6.2 Continue to educate dog owners of responsible pet ownership, including information on offleash, onleash and dog prohibited areas and requirements regarding dog faeces

<u>Objective 5. To minimise physical and health risks to users of the reserve</u> Strategy Action	
	5.6.3 Undertake Council ranger patrols of the area from time to time.
5.7 Ensure that volunteers working on the reserve are adequately covered for personal accident and public liability	5.7.1 Register all volunteers working on the reserve as Parkcare or Bushcare volunteers High Priority

7 Appendices

7.1 Appendix 1 - Legislative & Policy Framework

The management of public land requires compliance with existing government legislation and policy. The main aspects of current legislation and policy affecting the management of the O'Hara Head Reserve are outlined below.

The Crown Lands Act 1989 and the Coastal Crown Lands Policy are most significant. Both of these documents stress the conservation of natural resources and their management in an ecologically sustainable manner, while at the same time, providing appropriate opportunities for public use.

7.1.1 *Crown Land, the Reserve System and Trust Management*

The Crown Lands Act 1989 governs the planning, management and use of Crown land, including provisions to reserve or dedicate lands for a prescribed public purpose and for leasing and licensing. The collection of Crown land which has been set aside for a public purpose is called the Crown reserve system.

The Department of Lands, together with reserve trusts appointed by the Minister, is responsible for the administration and management of the Crown reserve system. The Minister appoints the Shoalhaven City Foreshore Reserves Trust, the affairs of which are managed by Shoalhaven City Council, to manage this reserve.

How Can Crown Land Be Used?

Uses and activities on land reserved for public purposes are broadly defined by the public purpose of the reservation, in conjunction with any conditions and provisions within the specific zoning in council's local environmental plan.

In addition, case law judgements influence the policy and practice of the Department of Lands and the Trust Manager. The body of case law which helps define acceptable uses and activities on public recreation reserves provides the following guidance:

- Improvements and developments to land which is reserved or dedicated are confined to those which support, or are ancillary to, the public purpose of the reservation;
- Land reserved or dedicated for public recreation must be open to the public generally as a right. The public may only be restricted from access to parts of the reserve and buildings thereon, if it is necessary for the public's enjoyment of the reserve to be excluded, eg a workshop, equipment storage or operational facilities;
- Right of access does not mean entirely free access. Reasonable entry fees and charges may be imposed as well as other legal constraints to entry, such as those relating to health and safety;

- Use of the reserve must be consistent with the public purposes for which the land is dedicated or reserved.
- A lease or licence must be consistent with the reason or purpose of the land's reservation or dedication.

7.1.2 *Crown Lands Act 1989*

Section 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.

Section 11 Crown Land Management Principles

The principles referred to in (b) and (c) above 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, fauna 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 interests of the State consistent with the above principles.

Section 112 Preparation of draft plan of management

- (1) The Minister may cause a draft plan of management to be prepared for a reserve.
- (2) A reserve trust may with the Minister's consent, and if the Minister so directs shall, prepare a draft plan of management for the reserve.
- (3) If the Minister directs a reserve trust to prepare a draft plan of management, the reserve trust shall:

- (a) prepare it within the time directed by the Minister, and
 - (b) forward a copy of it to the Minister.
- (4) A draft plan of management prepared by a reserve trust shall include provision for such matters as the Minister requires.

Section 113 Referral of draft plans

- (1) If a draft plan of management for a reserve is prepared, the Minister:
 - (a) shall refer a copy of it to the reserve trust for consideration (unless it was prepared by the reserve trust),
 - (b) may refer a copy of it to any other person for consideration, and
 - (c) shall place a copy of it on public display for not less than 28 days or shall direct the reserve trust to place a copy of it on public display for not less than 28 days.
- (2) Any person may make representations concerning the draft plan to the Minister within the time allowed by the Minister.
- (3) The Minister shall consider any such representations before adopting the draft plan.

Section 114 Adoption of plan

- (1) The Minister may adopt a plan of management for a reserve without alteration or with such alterations as the Minister thinks fit.
- (2) If a plan of management is adopted:
 - (a) the reserve trust shall carry out and give effect to it, and
 - (b) no operations may be undertaken on or in relation to the reserve unless they are in accordance with the plan.

7.1.3 *Crown Lands Regulation 2000*

Clause 35 Notification and public comment on draft plans of management

- (1) This clause applies to a plan of management under Division 6 of Part 5 of the Act that is required (before its adoption by the Minister) to be placed on public display.
- (2) The Minister is required to cause notice of a plan of management to be published in:
 - (a) the Gazette, and
 - (b) a newspaper circulating in the locality in which the land concerned is situated or in a newspaper circulating generally in the State.
- (3) Any such notice must:
 - (a) invite representations from the public concerning the plan, and
 - (b) specify the place and time at which the plan may be inspected by the public, and
 - (c) specify the period (being not less than 28 days) within which any representations may be made and the person to whom they are to be sent.

7.1.4 Coastal Crown Lands Policy

This policy was issued in January 1991 and applies to all coastal Crown lands within one kilometre landward and three nautical miles seaward from low water mark. The objectives of the policy are to -

- Conserve and maintain the intrinsic environmental and cultural qualities of coastal Crown land.
- Retain all coastal Crown lands of an environmentally sensitive nature and/or required for a public purpose, in public ownership.
- Optimise public access and use of coastal Crown lands.
- Provide Crown lands, as appropriate, for recreation, tourism, residential and commercial coastal development with due regard to the nature and consequences of coastal processes.
- Encourage the rehabilitation of degraded coastal Crown lands.
- Continue to acquire significant coastal lands for future public use.

7.1.5 NSW Coastal Policy 1997

The overriding vision of the 1997 Coastal Policy is the ecological sustainability of the NSW coast. The natural environment of the coastal zone must be protected, rehabilitated, and improved whilst providing for ecologically sustainable development and use of resources, including appropriate public access and use. Council must take the Coastal Policy into account when considering development applications in the Coastal Zone (see also State Environmental Planning Policy No. 71 - Coastal Protection, below)

7.1.6 NSW Coastline Hazard Policy 1990

The primary objective of this policy is to reduce the impact of coastal hazards and to reduce losses resulting from natural coastal forces through the application of effective planning and development controls by local councils, and by undertaking timely and effective mitigating works and other measures.

7.1.7 NSW Environmental Planning & Assessment Act 1979

The EP&A Act has the following objectives:

- to encourage the proper management, development and conservation of natural resources for the purpose of promoting the social and economic welfare of the community and a better environment
- the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities and their habitats.

7.1.7.1 Environmental assessment

Environment assessment must be carried out for any proposed development or activity. Those uses of the reserve that require development consent are subject to environmental assessment under Part 4 of the EP&A Act. Environmental assessment under Part 5 of the EP&A Act must also be carried out for proposed activities that do not require development consent.

7.1.7.2 Local Environmental Plan

Any land use proposed for an area must be consistent with the zoning that is applied to the land by Council's Local Environment Plan prepared under Part 3 of the EP&A Act. Most of the O'Hara Head Reserve is zoned 6 (a) (Open Space – Recreation).

7.1.7.3 State Environmental Planning Policy (SEPP) No. 71 - Coastal Protection

The Policy has been made under the Environmental Planning and Assessment Act 1979 to ensure that development in the NSW coastal zone is appropriate and suitably located, to ensure that there is a consistent and strategic approach to coastal planning and management and to ensure there is a clear development assessment framework for the coastal zone. Because much of the O'Hara Head Reserve is within 100 metres of the sea, it is defined in the SEPP as a sensitive coastal location. Therefore, development applications must be sent to the Director-General of Planning who will consider whether council or the Minister for Planning is to determine the application and whether any matters additional to those set out in the SEPP must be taken into account.

7.1.8 *The Local Government Act, 1993*

The purposes of this Act are as follows:

- (a) to provide the legal framework for an effective, efficient, environmentally responsible and open system of local government in New South Wales,
- (b) to regulate the relationships between the people and bodies comprising the system of local government in New South Wales,
- (c) to encourage and assist the effective participation of local communities in the affairs of local government,
- (d) to give councils:
 - the ability to provide goods, services and facilities, and to carry out activities, appropriate to the current and future needs of local communities and of the wider public
 - the responsibility for administering some regulatory systems under this Act
 - a role in the management, improvement and development of the resources of their areas,

(e) to require councils, councillors and council employees to have regard to the principles of ecologically sustainable development in carrying out their responsibilities.

The Local Government Act 1993 includes a range of requirements on the management and use of public land.

The Local Government Act 1993 also considers acts of vandalism in public places (eg. injuring plants and animals or defacing property) and gives Councils the power to establish and enforce alcohol free zones.

7.1.9 Marine Parks Act 1997

The Batemans Marine Park covers coastal and estuarine waters from the northern end of Murramarang Beach to Wallaga Lake, including the waters and intertidal areas around OHara Head.

The objects of Marine Parks Act are:

- a) to conserve marine biological diversity and marine habitats by declaring and providing for the management of a comprehensive system of marine parks,
- b) to maintain ecological processes in marine parks,
- c) where consistent with the preceding objects:
 - i. to provide for ecologically sustainable use of fish (including commercial and recreational fishing) and marine vegetation in marine parks, and
 - ii. to provide opportunities for public appreciation, understanding and enjoyment of marine parks.

The NSW Marine Parks Authority is the agency responsible for establishing and managing marine parks. The Act requires the development of a zoning plan and an operational plan which were being developed when this plan of management was finalised.

7.1.10 Rural Fires Act 1997

Section 63(1) states:

“It is the duty of a Public Authority to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bush fires on, and to minimise the spread of a bush fire on or from:

- (a) any land vested in or under its control or management, or
- (b) any highway, road, street, land or thoroughfare, the maintenance of which is charged on the authority.”

One of the objects of the Rural Fire Act is to provide for the protection of the environment by requiring certain activities to be carried out having regard to the principles of ecologically sustainable development described in Section 6(2) of the Protect of Environment Administration Act 1991.

7.1.11 Native Vegetation Conservation Act, 1997

The Act relates to the conservation and sustainable management of native vegetation and the clearing of land.

The Act contains provisions relating to State Protected Lands, which were formerly contained in the Soil Conservation Act. These provisions serve to protect trees and shrubs on lands that have been mapped as steeply sloping (over 18°), within 20 metres of specified watercourses, or are environmentally sensitive.

7.1.12 Rivers and Foreshores Improvement Act, 1948

This Act makes provisions for the protection and improvement of protected waters (i.e., watercourses as defined in the Act) and the associated beds, banks, shores and land within 40 metres of these waters. Any excavation or filling works in or within 40 metres of protected waters may require a Part 3A permit under the Act. Advice should be sought from the Department of Natural Resources.

7.1.13 Shoalhaven City Council Foreshore Reserves Policy (2005)

Council adopted a Foreshore Reserves Policy in June 2005 which aims to provide direction and certainty in the future management of reserves along our coast, rivers and estuaries. That policy has guided many of the statements included in this plan of management.

7.1.14 Shoalhaven City Council Recreation Strategy (1999)

Council adopted a Recreation Strategy in late 1999 which aims to

“Improve the quality of life in the Shoalhaven by creating a diversity of recreation opportunities whilst protecting and enhancing the natural and built environment”

The Recreation Strategy identifies a range of actions to meet this goal, based on the following:

The provision of recreation facilities, programs and services is to:

- be based upon an assessment of current and future needs
- be realistic in terms of Council’s (and the community’s) ability to operate and maintain them

- ensure the achievement of equity of opportunity for all individuals and groups within the city, regardless of age, ability, ethnicity or economic capacity
- avoid unnecessary duplication of opportunities
- be based upon efficiency, quality and continuous improvement principles and approaches
- be based upon meaningful community consultation
- incorporate resource sustainability practices and principles
- incorporate best practice risk management processes to reduce public risk
- include the encouragement and support of community and commercial initiatives in the provision and management of recreation opportunities

7.1.15 Food and Beverage Outlets on Crown Reserves, 2001

This policy provides guidance for assessing food and beverage outlets that may be acceptable and those that may not be acceptable on Crown reserves. In determining whether a proposal is appropriate the following criteria should be applied:

- The facility should enhance the public use of the reserve and not become the main focus of the reserve;
- The integrity of the reserve in terms of its public purpose and environmental qualities should be preserved; and
- The public's right of access to the reserve should be preserved.

The current Policy groups food and beverage outlets into 5 categories (see below) that are to be applied to the reserves as follows:

- Categories i to iii may apply to all public purposes where food and beverage outlets are an acceptable use.
- Categories iv and v may apply to public purposes where food and beverage outlets are an acceptable use other than: Arboretum; Public Park; Public Recreation; Public Recreation and Coastal Environmental Protection; Public Recreation, Conservation and Mineral and Petroleum Exploration.

Categories of Food and Beverage Outlets that may be acceptable on Crown Reserves:

- i. Kiosks that provide snacks, packaged and prepared light foods with non-alcoholic beverages to take away are an acceptable use on public purpose reserves, where they are ancillary and supportive of the use of the reserve.
- ii. Refreshment rooms, cafes and coffee shops which serve snacks, light meals and beverages to take away or to be consumed on the premises are acceptable uses on public purpose reserves, where they are ancillary and supportive of the use of the reserve.

- iii. A bistro, brasserie or restaurant that serves light to substantial meals with beverage to be consumed on the premise, is an acceptable use on public purpose reserves where they are ancillary and supportive of the use of the reserve.

Categories of Food and Beverage Outlets that may not be acceptable on Crown Reserves:

- iv. Major fast food operations that essentially service a passing trade rather than reserve users and cannot be regarded as ancillary to the reserve; and
- v. Restaurants that serve only substantial meals; contain a bar area that precludes the under 18 age group; or essentially service a passing trade rather than reserve users and cannot be regarded as ancillary to the reserve.

7.1.16 Wedding Receptions On Public Parks

Adopted 22/07/03 – Minute 03.964 – File 03/6320

Council's policy for wedding receptions on parks is as follows:

- a) Sufficient notice be provided to allow for the processing of a development application that includes adequate consultation with neighbouring residents.
- b) Development Applications will not be supported for popular locations – especially during peak visitation – where a conflict between casual users and a wedding is possible.
- c) Development Applications will not be supported for locations that are substantially overlooked by residences or for those locations where a large marquee would be overly dominating of view lines.
- d) Although exclusive use of a specific area might be approved, no fencing or other structural barriers shall be permitted.
- e) A specific fee for events requiring development consent shall be established. It is proposed that such fee be \$220, plus GST, per day.
- f) The fee shall apply for each day the reserve is required for setting up and dismantling of structures.
- g) A bond of \$1,000 shall be required to protect Council from damage to the reserve or necessary clean up following the event.

7.2 Appendix 2 – Plant Species List

The species lists below are not comprehensive, but can form a starting point for documenting a more complete flora for the reserve. The lists are based on opportunistic observations made on a number of visits to the reserve, not on systematic surveys. There are many more plant species that are present in the reserve and as they are identified the following list can be expanded. Introduced species are not included here. They are dealt with in the “Weeds” section of this plan.

O'Hara Head

Coastal Wattle	<i>Acacia sophorae</i>
Grey Saltbush	<i>Atriplex cinerea</i>
Coast Banksia	<i>Banksia integrifolia</i>
Coastal Pigface	<i>Carpobrotus glaucescens</i>
Long-leaved Cassinia	<i>Cassinia longifolia</i>
Swamp Oak	<i>Casuarina glauca</i>
Flax Lily	<i>Dianella</i> sp.
Bangalay	<i>Eucalyptus botryoides</i>
Scrambling Lily	<i>Geitonoplesium cymosum</i>
Guinea Flower	<i>Hibbertia</i> sp.
Coastal Beard Heath	<i>Leucopogon parviflorus</i>
Cabbage Palm	<i>Livistona australis</i>
Spiny-Headed Mat Rush	<i>Lomandra longifolia</i>
Paperbark	<i>Melaleuca</i> sp.
Mangrove Boobialla	<i>Myoporum acuminatum</i>
Boobialla	<i>Myoporum boninense</i>
Mock Olive	<i>Notelaea</i> sp.
Bleeding Heart	<i>Omalanthus populifolius</i>
Monkey Rope	<i>Parsonsia straminea</i>
Native Reed	<i>Phragmites australis</i>
Sweet Pittosporum	<i>Pittosporum undulatum</i>
Bracken	<i>Pteridium esculentum</i>
Seaberry Saltbush	<i>Rhagodia candolleana</i>
Warrigal Greens	<i>Tetragonia tetragonoides</i>
Scrub Nettle	<i>Urtica incisa</i>
Coast Rosemary	<i>Westringia fruticosa</i>

Merry Beach

Coast Banksia	<i>Banksia integrifolia</i>
Old Man Banksia	<i>Banksia serrata</i>
Bangalay	<i>Eucalyptus botryoides</i>
Mangrove Boobialla	<i>Myoporum acuminatum</i>
Scentless Rosewood	<i>Synoum glandulosum</i>

Kioloa Beach/Butlers Creek

Coastal Wattle	<i>Acacia sophorae</i>
Coast Banksia	<i>Banksia integrifolia</i>
Breynia	<i>Breynia oblongifolia</i>
Coastal Pigface	<i>Carpobrotus glaucescens</i>
Swamp Oak	<i>Casuarina glauca</i>
Old Man's Beard	<i>Clematis aristata</i>
Spotted Gum	<i>Corymbia maculata</i>
Swamp Lily	<i>Crinum pedunculatum</i>
Flax Lily	<i>Dianella</i> sp.
Kidney Weed	<i>Dichondra repens</i>
Blueberry Ash	<i>Elaeocarpus reticulatus</i>
Bangalay	<i>Eucalyptus botryoides</i>
Swamp Mahogany	<i>Eucalyptus robusta</i>
Forest Red Gum	<i>Eucalyptus tereticornis</i>
Wombat Berry	<i>Eustrephus latifolius</i>
Cherry Ballart	<i>Exocarpus cupressiformis</i>
Sword Grass	<i>Gahnia</i> sp.
Scrambling Lily	<i>Geitonoplesium cymosum</i>
Cheese Tree	<i>Glochidion ferdinandi</i>
Love Creeper	<i>Glycine</i> sp.
Hardenbergia	<i>Hardenbergia violacea</i>
Guinea Flower	<i>Hibbertia</i> sp.
Blady grass	<i>Imperata cylindrica</i>
Dusky Coral Pea	<i>Kennedia rubicunda</i>
Tea Tree	<i>Leptospermum</i> sp.
Coastal Beard Heath	<i>Leucopogon parviflorus</i>
Spiny-Headed Mat Rush	<i>Lomandra longifolia</i>
Burrawang	<i>Macrozamia communis</i>
Mock Olive	<i>Notelaea</i> sp.
Monkey Rope	<i>Parsonsia straminea</i>
Rough-fruit Pittosporum	<i>Pittosporum revolutum</i>
Sweet Pittosporum	<i>Pittosporum undulatum</i>
White Root	<i>Pratia purpurascens</i>
Pastel Flower	<i>Pseuderanthemum variabile</i>
Bracken	<i>Pteridium esculentum</i>
Seaberry Saltbush	<i>Rhagodia candolleana</i>
Lilac Lily	<i>Schelhammera undulata</i>
Kangaroo Apple	<i>Solanum aviculare</i>
Beach Spinifex	<i>Spinifex sericeus</i>
Tylophora	<i>Tylophora barbata</i>

7.3 Appendix 3 – Consultation

Adequate consultation is essential when developing a Plan of Management, so that community values and issues can be identified. Community values are the attributes that make something, for example a park, important to the community as a whole. Values tend to change little over time and to be broad in nature. Issues, or problems, are those things that need to be dealt with in order to protect values.

The values used to develop the Basis for Management for O'Hara Head Reserve came from two main sources:

- those specific to the reserve identified in the community survey for the parks carried out in October 2003 (see survey questions and results on following pages)
- those more broad values for parks in the Shoalhaven that were identified in 1996, when Council undertook a Recreation Study to identify community values, needs, expectations and levels of satisfaction with respect to recreation facilities and services in the Shoalhaven.

7.3.1 Recreation Study

The results of the Recreation Study formed the basis of the Shoalhaven Recreation Strategy (1999). The community values for Parks reflected in the Recreation Strategy that have been used as a basis for management in this plan are set out below.

Social Values

For hundreds of years, parks have been incorporated in the design of residential and urban settlements. The planned inclusion of parks in urban design over this time demonstrates how integral parks are to the quality of life that is experienced by the community they serve.

Parks provide a sense of spatial relief in built up environments; they provide opportunities for socialisation (for all age groups) and contribute to the local identity of an area. For example, Nowra is well known for its “water feature parks”.

Recreational Values

Recreation is becoming an increasingly important value for individuals and the wider community as people are realising the benefits of recreation in achieving quality of life. One of the most important functions of parks is to provide recreation opportunities to the community.

The recreational value of parks is enhanced when a broad range of high quality opportunities are provided, which are capable of meeting the needs of the majority of the population. These opportunities include physical activity, relaxation, solitude and socialisation depending on the individual nature of the park, and the needs of the individual.

Health Values

Parks contribute to the health and well being of the community. The provision of open space and expanses of vegetation improve air and water quality and provide a visual relief from developed environments.

Particularly in areas where there is high housing density and small allotment sizes, parks provide an opportunity to enjoy the outdoors in a safe and stimulating environment. The presence of play equipment, walking trails and the like also allow for the community to participate in locally based, no-cost physical activity.

Environmental Values

Parks make up a significant proportion of the Shoalhaven's reserve network and as such, are valued highly by the community for the open space they offer and for the functions this space performs. As previously mentioned, the presence of parks and the associated vegetation allows for improvements to air and water quality. Parks also provide habitat for native wildlife and allow for the protection of biodiversity. When parks are developed within a connective open space system, they can also act as wildlife corridors, which are essential to maintain the genetic biodiversity of native flora and fauna.

The preservation and enhancement of these areas is of paramount importance in maintaining the lifestyle enjoyed in the Shoalhaven.

Economic Values

The economy of the Shoalhaven is particularly dependent on tourism. Tourism NSW states that the Shoalhaven is the second most popular tourist destination in the state (after Sydney). In 1999, it was estimated that the direct expenditure of tourists in the Shoalhaven was \$250 million. Much of this visitation and expenditure is based on the natural environmental beauty of the Shoalhaven and the diverse range of recreational opportunities this environment provides.

Due to their location and the diverse range of recreational opportunities available, parks are extremely popular with visitors to the Shoalhaven. The economic value of well-appointed and maintained parks is integral to the overall economy of the area.

7.3.2 *Kioloa Specific Consultation*

Stakeholder Discussions

Discussions have been held with key stakeholders including the Department of Lands, the Coastal Patrol, members of the Bushcare group, Kioloa/Bawley Point Community Facilities Management Committee, Kioloa Bawley Point Sport and Recreation Club and a number of individuals with a strong interest in the reserve.

Newsletters and Community Survey

In October 2003, a newsletter and survey form was letterboxed in the villages of Kioloa and Bawley Point and mailed to all non-resident ratepayers and to local community organisations. It was also available on Council's internet site. A copy of the survey and results are on the following pages. One hundred and sixteen responses were received in time for analysis.

A second community newsletter was distributed in October 2004 (see following pages) dealing with safe pedestrian access to the southern end of Kioloa Beach.

Community Workshop

A community workshop held at the Kioloa Community Centre in November 2003 was publicised through local media, through the October newsletter and by personal letters. About fifty people attended the workshop. The purpose of the workshop was to present the results of the community survey and to obtain some detailed community input in relation to the following specific issues in management of the reserves. The attendees were divided into groups of 5 to 10 and were given specific topics to discuss:

- Topic 1. What facilities where?
- Topic 2. What needs fixing?
- Topic 3. Who should manage the reserves?

In relation to Topic 3, the following comments were made:

Group 1

- Kioloa Beach Holiday Park should continue to manage (care take) its area (outside fence) as is.
- Council should manage all the other land from Kioloa Beach to Merry Beach i.e., take over management of unreserved Crown Land because:
 - One body to deal with
 - Crown Land is in small isolated parts
 - Council is more easily accessed by the community
 - We have a vote at Council
 - Funding is more likely to come from Council than Lands Department
 - Council is more active and recognises local environment issues.

Group 2

- Council should manage land provided
 - It is maintained to current or better standards than existing
 - Future improvements or problems can be approached through one source
 - What about additional cost to Council?
 - Fragmentation is not desirable

Exhibition of Draft Plan of Management

In accordance with the provisions of the Crown Lands Act 1989, a draft of this Plan of Management was exhibited for public comment from 25 January to 10 March 2006. Kioloa residents and ratepayers were notified in writing. The draft document was available for viewing at the Ulladulla library, the Royal Volunteer Coastal Patrol at Kioloa, on Council's internet site and at the Nowra Office of the Department of Lands.

Seven submissions on the draft Plan of Management were received and were reviewed in consultation with the Department of Lands.

Six of the submissions were generally supportive of the draft plan, although suggestions were made for some changes. One submission was neither clearly in favour/not in favour, but provided some comment on plan detail.

It was considered that some matters raised in submissions could be dealt with at the detailed planning stage of proposed works, some were not considered appropriate for inclusion and some could be accommodated by amendment of the draft.

Community Newsletter September 2003
File 28769

**What Does The Future Hold
 for
 Kioloa's Coastal Reserves?**

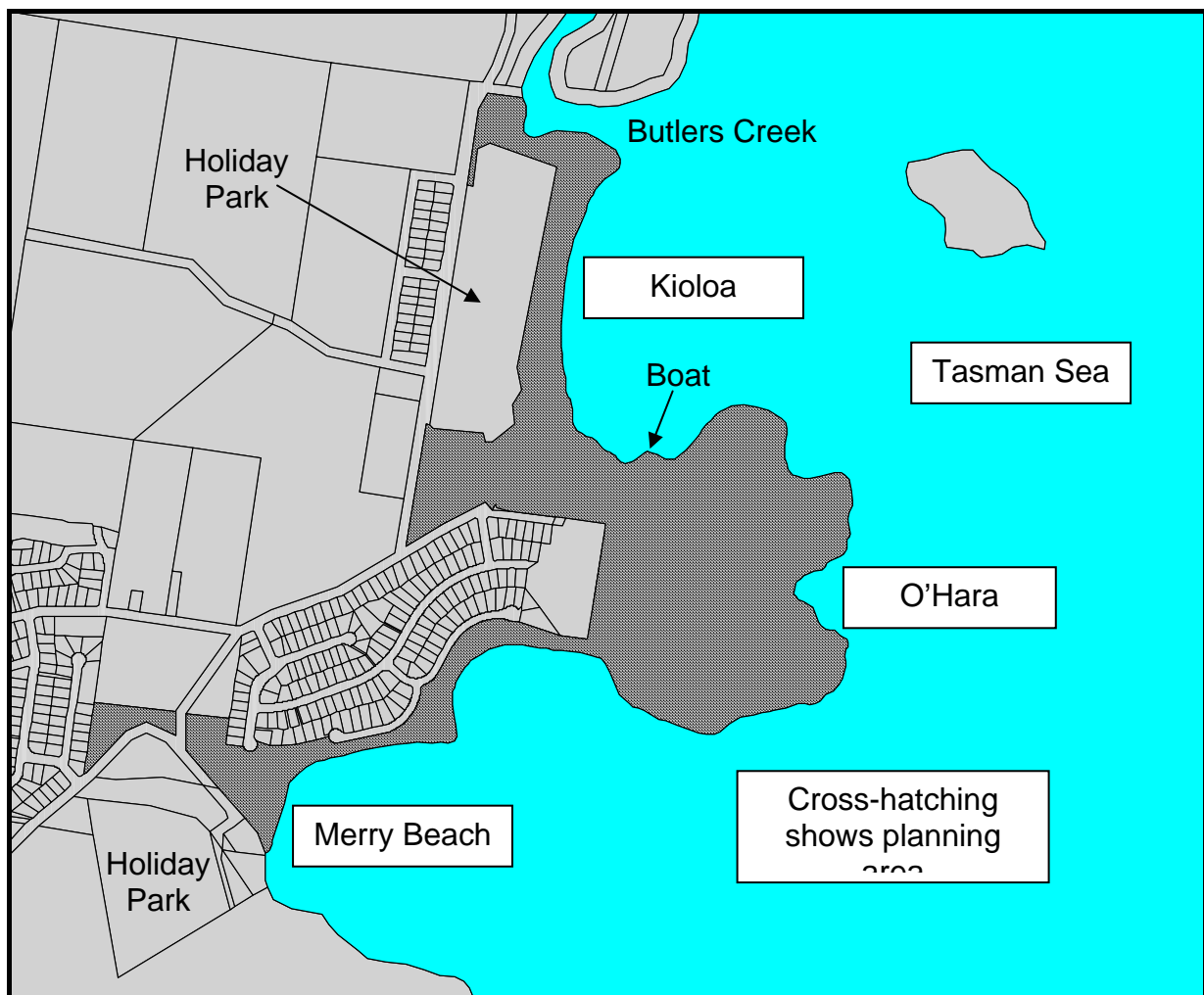


PO Box 42 Nowra 2541

Shoalhaven City Council wants your help in preparing a Plan of Management for public land on the coast between Butlers Creek at the northern end of Kioloa Beach, south to Merry Beach. The plan will aim to protect the special values of the coast and will describe ways that the land can be used, conserved, developed, and managed into the future.

The planning area, cross-hatched on the map below, consists of a series of Crown reserves (for various purposes, including public recreation and access), some unreserved Crown land and some Council-owned Community Land. As well

as managing the Council-owned land, Council currently manages some of the Crown land, but not all of it. For example, the areas to the east and north of the Kioloa Beach Holiday Park have, in the past, been managed by that Park's proprietors. The NSW Department of Lands has proposed that all of the Crown land, down to low water mark, be combined into a single reserve for the purpose of Public Recreation and Coastal Environmental Protection, with Council to be appointed as trust manager for the reserve. The current planning process will help identify the feasibility of that proposal.



Importance of the reserves

Kioloa's Coastal Reserves are used by many people, both residents and visitors, with flow-on social and commercial benefits to the local community. The reserves are important areas for active and passive recreation, and their significant natural values add to their importance. However, visitors to the reserves will know that, in their current condition, they show some signs of wear and tear. As part of the planning process, works will be devised to prevent further degradation of the reserves.

What We Want To Achieve

Management of Kioloa's Coastal Reserves for their recreational, natural and other values will require careful planning. To achieve this, we must

- Identify the significant **values** of the reserves, i.e., what's important about the place.
- Establish broad management **objectives** for the reserves to protect and enhance the identified values. These objectives describe where we want to end up and will provide the grounds for making further decisions.
- Identify **issues** or problems that need to be considered in relation to these values.
- Determine appropriate management **strategies** that will ensure the maintenance of conservation, recreation, aesthetic and other values.
- Develop a comprehensive **action** plan, including a landscape concept plan to show how each strategy will be put into practice.
- Identify the most appropriate Reserve structure and the most appropriate manager for doing the works set out in the plan, and identify where the resources to do it should come from.

Having Your Say

Council will be seeking a lot of input from the community during the preparation of the plan. You can contribute now by completing and returning the attached survey form by 17th October 2003. The preliminary information collected from this survey and from other sources will be collated and analysed, and on 27th November 2003 a public workshop will be held, providing everyone that is interested with

an opportunity to discuss the proposed content of the plan. Details of the workshop will be advertised in local papers in mid-November. It is expected that a draft plan of management can then be prepared and made available for you to comment on before the middle of 2004.

Crown Land Management Principles

The Crown Lands Act 1989 requires that Crown land must be managed for the benefit of the people of New South Wales according to broad principles of:

- protecting the environment,
- conserving natural resources and
- encouraging multiple use, including sustainable public use and enjoyment.

Community Land Management

The Council-owned land in the planning area is classified as Community Land under the Local Government Act and categorised under that act as Natural Area. The Act says the land must be managed to:

- conserve biodiversity and maintain ecosystem function,
- maintain the land in its natural state and setting,
- provide for the restoration and regeneration of the land and
- provide for community use of and access to the land while minimising disturbance.

For more information on this project please contact –

Peter Dalmazzo
Parks and Recreation
Shoalhaven City Council
PO Box 42 Nowra 2541
Phone: 02 4429 3380
Fax: 02 4429 3175

Please help Council to plan for the future of Kioloa's Coastal Reserves by filling out this survey and returning it by 17th October, 2003. You can fold it and mail it without a stamp, or fax it to 4429 3175. If you would prefer to submit it electronically, the form is also available in the Public Documents section of Council's internet site (<http://shoalhaven.nsw.gov.au>).

Privacy Notification

The information requested on this form is being collected by Shoalhaven City Council and will be used by Council and NSW Government officials to assist in the preparation of a plan of management for Kioloa's Coastal Reserves. The provision of this information is voluntary and you may apply to Council for access to or amendment of the information at any time.

Optional: Please provide your details so we can contact you to get more information if needed:

Name:.....

Address:.....

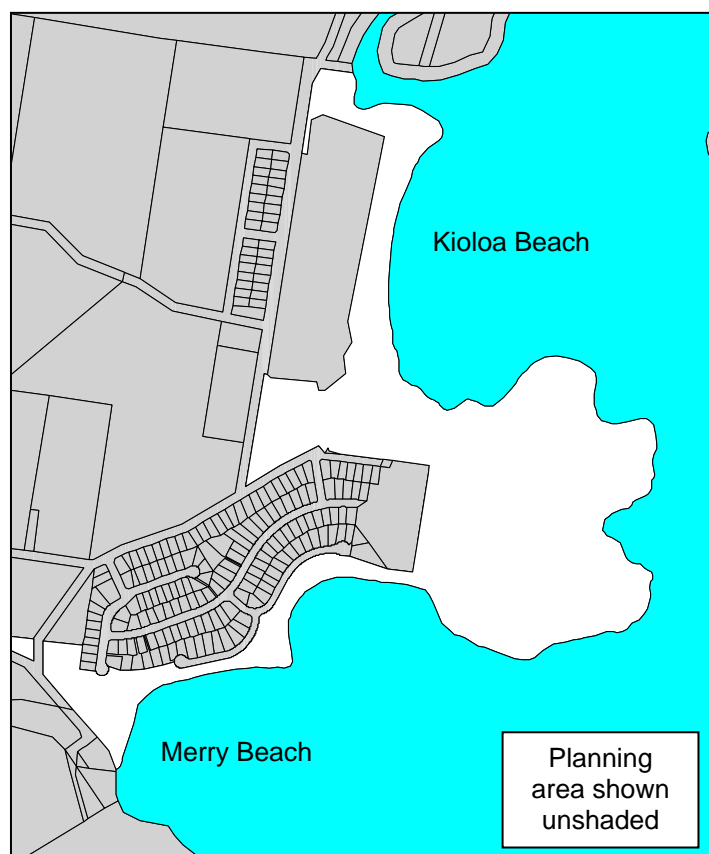
Telephone:..... E-mail:.....

If you want to be added to a mailing list for this project, tick this box ☐

1. How Do You Use Kioloa's Coastal Reserves?

Please fill in the table and write the activity numbers from the left column of the table onto the map to show where you like to do each activity.

<i>Activity No.</i>	<i>Activity</i>	<i>Approx. how many days per year?</i>
1	Beach walking	
2	Bush walking	
3	Jogging	
4	Walking the dog	
5	Swimming	
6	Launching boat	
7	Fishing from the shore	
8	Snorkelling/SCUBA diving from shore	
9	Picnicking/BBQ	
10	Appreciating view	
11	Bird/nature watching	
12	Playing games (please specify)	
13	Relaxing (please specify how)	
14	Socialising (please specify how)	
15	Commercial activity (please specify)	
16	Other (please specify)	



2. What's important to you about Kioloa's Coastal Reserves?

3. What uses do you think are appropriate for Kioloa's Coastal Reserves?

4. What uses do you think are not appropriate for Kioloa's Coastal Reserves?

5. What problems are there in Kioloa's Coastal Reserves that you think should be addressed in the plan of management?

6. What facilities do you think there should be in Kioloa's Coastal Reserves?

7. Do you have any information on the history or nature (vegetation, birds, geology, etc) of Kioloa's Coastal Reserves?

Delivery Address:
PO Box 42
NOWRA NSW 2541

No stamp required
if posted in Australia



Kioloa's Coastal Reserves Plan - File 28769
Shoalhaven City Council
Reply Paid 42
NOWRA NSW 2541

Safe Pedestrian Access to the Southern End of Kioloa Beach



PO Box 42 Nowra 2541

What's the Problem?

Safe access for pedestrians from Scerri Drive to Kioloa Beach is one of the important issues identified through the community consultation process for the Kioloa Coastal Reserves Plan of Management. There is concern in the community about dangers arising from pedestrian/vehicle conflict on the boat ramp access road during busy times.

There are a number of factors that contribute to this, including:

1. inappropriate parking by vehicles and trailers, narrowing the amount of road available for travelling vehicles and pedestrians,
2. lack of alternatives for pedestrians other than walking on the road,
3. inappropriate driver behaviour.

What Are We Doing About It?

To help with the first issue, Council's Traffic Committee recently decided to install 'No Stopping' signs down the west side of the access road.

To help with the second issue, it is now proposed to improve pedestrian access to the beach at Kioloa by making a track from Scerri Drive to the beach, and building two accessways from the boat ramp car park down onto the beach. At the same time improvements will be made to a short section of walking track onto OHara Head, north of the Coastal Patrol building. The proposals are outlined over the page.

It is estimated that the work will cost about \$15,000 (excluding Council staff time) and will be funded from existing budgets for coastal management and the reserve plan of management. The amount may be reduced a little with the help of community volunteers.

When Will It Happen?

Once comments have been received and considered, and provided there are no unforeseen delays, it is expected that work can be completed before Christmas 2004.

What's Happening With the Plan of Management?

Work on the Kioloa Coastal Reserves Plan of Management is progressing but because of changes in priorities it will not be completed before Christmas this year. Once a draft has been developed it will be exhibited for public comment, and its adoption and implementation considered by Council and the Department of Lands. This process of finalising the plan will take several months. That's why we are proposing to do the track work now, so it will be in place for the upcoming summer holidays. Amongst the full range of matters included in the plan of management, we will deal further with improving parking for boat trailers, and traffic calming on the boat ramp access road.

Any Comments?

If you have any comments to make on the current proposals for tracks and beach accessways please do so before Friday 29th October by writing (quoting file number 28769) to:

The General Manager
Shoalhaven City Council
PO Box 42
Nowra 2541

Or you can fax your comments to 02 4422 1816
Or email to council@shoalhaven.nsw.gov.au

If you need further information you can contact Council on 4429 3111 and ask for Peter Dalmazzo (Project Officer) or Ray Massie (Coast and Estuaries Officer) or Al Stratton (Bushcare Co-ordinator).

The Proposal

To improve pedestrian access to the beach at Kioloa, Council proposes to:

1. make a walking track from Scerri Drive to the boat ramp car park,
2. build two accessways from the boat ramp car park down onto the beach,
3. at the same time, improvements will be made to a short section of track onto O'Hara Head, northeast of the Coastal Patrol.

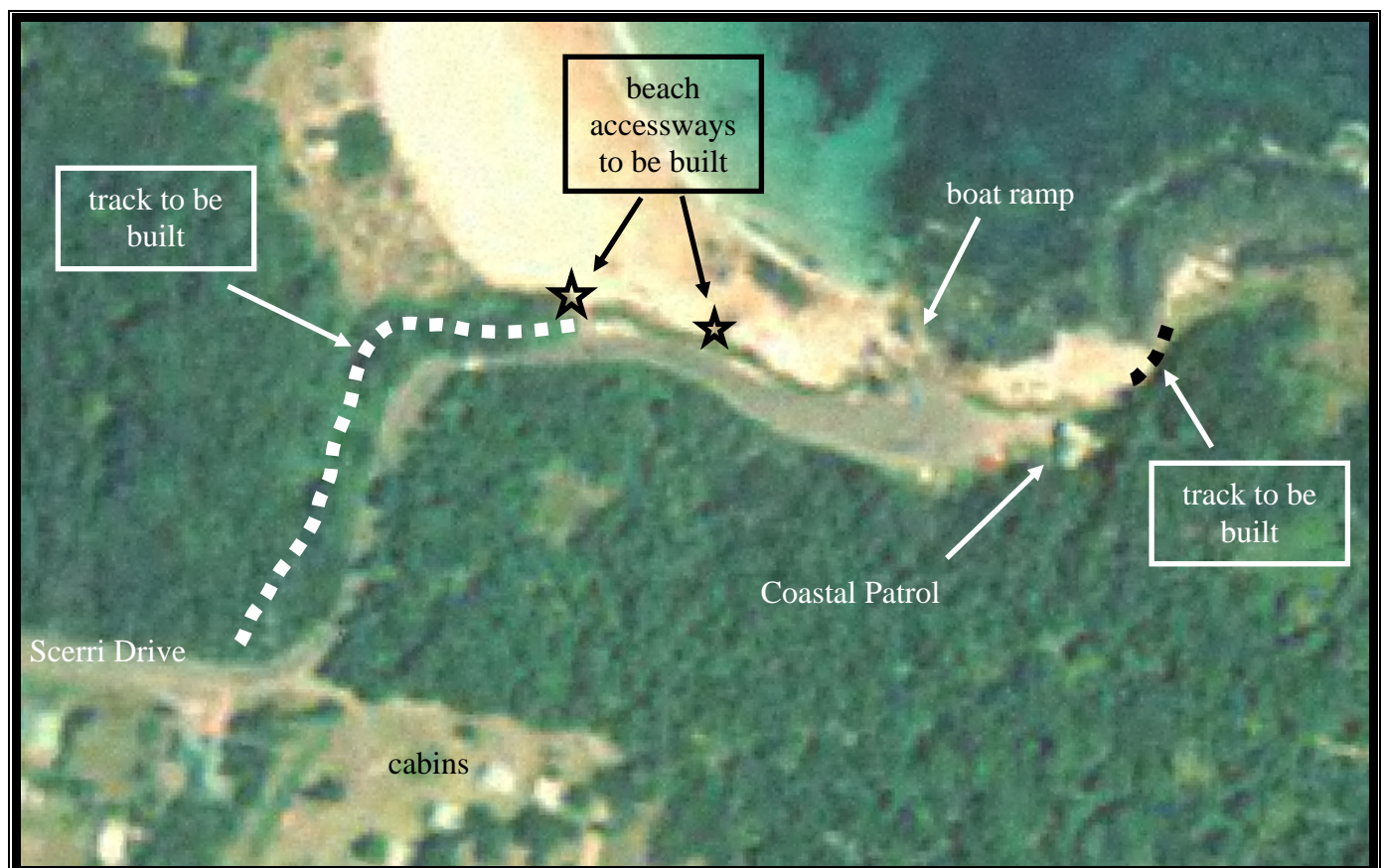
As shown on the picture below, the track from Scerri drive will go through the bush to the west of boat ramp access road. This will allow pedestrian access to the beach and boat ramp area without having to cross the access road. People coming from the south and east (eg, Wollombi Way or Kioloa Holiday Cabins) would still have to cross Scerri Drive, but visibility is good there. The proposal is for a track that passes through the Swamp Oak (*Casuarina glauca*) forest parallel to, and a few metres from, the access road, and then back up on to the road verge near the bottom bend in the access road. The track would be crushed sandstone about 2 metres wide. A small number of Swamp Oaks would need to be trimmed or removed.

At the beach, two accessways will be built. The track would connect with the first of these, at the

western end of the car park, where there is currently an eroding gully and exposed steel tracks. This accessway would be in the form of a cement stabilised crushed sandstone ramp suitable for emergency vehicle access to the beach. A sliprail would be installed at the top of the ramp to prevent use by unauthorised vehicles, with access left for pedestrians. The second accessway would be about halfway to the boat ramp, mainly for those people that have driven to the car park. It would be a stairway with a handrail on one side.

Other Options That Were Considered

1. Build a path immediately beside access road – limited space available – pedestrians still close to cars.
2. Put a track through bush to east of access road – would require pedestrians to cross road near the blind curve.
3. Put a track through the Swamp Oak forest commencing further to west (toward Murramarang Road) – does not provide access for people walking down Wollombi Way and houses/cabins further east – they would mostly continue to walk down access road
4. Take track on to beach further west than proposed – does not provide access for people walking to boat ramp area – they would still walk on the road.



Survey Responses

Question 1– refer to section 2.2.4 of the plan.

Question 2. What's important to you about the reserves?

Comment	Number of respondents that mentioned it
Natural environment, untouched bush & beachfront, wildlife, birds, plants, pristine coast/beaches, clear water, habitat, unspoilt, foreshore vegetation, geology, sounds	65
keep as reserve/preserved/keeping as is/keeping balance	32
minimal commercial use/unoccupied/no houses on beach, foreshore/undeveloped	27
beauty - unspoilt, natural, rugged	24
accessibility/public access/keeping open to public/ease of access/no barriers/unhindered/unrestricted	20
clean/safe	14
quiet/serene/peaceful/tranquil	8
holiday/recreational value	8
simple/relaxed nature/no unnecessary structures/basic facilities/no hype/absence of large carparks, picnic tables, etc	6
Being able to catch fish/diving	4
boat ramp	3
maintenance	3
lack of people/uncrowded	2
remove banksias and undergrowth	1
walks	1
safe swimming area	1
create more open day use areas	1
dog friendly	1
facilities, toilets, parking, water, bins, walkways	1
friendly, harmonious community	1
history	1

Question 3. What uses do you think are appropriate?

Comment	Number of respondents that mentioned it
walking/bushwalking	33
swimming	23
fishing	22
recreation/private recreation/active and passive	18
enjoying nature/beauty/views	18

conservation/natural habitat area/environmental protection/bush regeneration	17
As is/existing uses	15
picnic/BBQ/grass areas	15
1-14	11
launching boats/boating	10
family areas/activities	9
for the people/public use	9
resting/relaxing	8
non damaging/ low impact	6
passive recreation	5
enjoying beach	4
snorkelling	4
birdwatching	4
walking dog/on leash dogs	3
ball games	3
whale watching	2
low key commercial/sail boat hire	2
mixture	1
surfing	1
scientific study	1
reserve	1
cleaning fish	1
getting peace and quiet	1
organised events - ocean swims/iron man/fishing comps	1
rock climbing	1
jogging	1
cycling	1
rabbits	1

Question 4. What uses do you think are not appropriate?.

Comment	Number of respondents that mentioned it
commercialisation/commercial	32
development/private development/overdevelopment	22
jet skis	19
4wds/motorbikes/cars	18
residential/housing development	13
camping/large camping areas/caravan parks/expansion of	10
dogs off leash	8
motel/hotels/tourist resorts/clubs	6

roads/buildings/structures	6
fencing off beaches/restricting access	5
vendors/shops	4
intrusive recreation/noisy vehicles and boats	4
dogs	3
picnic tables/bbqs	3
commercial fishing	3
parking lots/van park patrons parking	3
threats to natural values	3
picnic areas/ large picnic areas/clearings	2
toilets	2
team sports/organised games	2
sewage works	2
major fishing vessels/whale watch boats	2
intrusive picnic/recreational facilities	2
extension of boat ramp car park	2
horseriding	2
spearfishing	2
dogs on O'Hara Head	1
recreation	1
high speed boats	1
surf skis	1
camping on O'Hara Head	1
parking fees	1
enclosed areas for exclusive use of resorts	1
boat ramp upgrade	1
ball games	1
mountain bikes	1
camp fires	1
no alcohol zone	1
walkways	1
overcrowding (people or boats)	1
totally wildlife habitat	1
fencing preventing access through van park	1
abalone diving	1
snorkelling/ scuba diving	1
marinas	1
government interference	1
quarries	1
snorkelling near boat ramp	1
drug plantations	1
fishing	1

Question 5. What problems should be addressed?

Comment	Number of respondents that mentioned it
path to boat ramp area/traffic control/widen road to ramp	19
uncontrolled dogs/dog poo/dogs swimming	14
litter/rubbish dumping/car dumping	12
weeds/bitou	12
none	10
poor access to some beaches/disabled access	9
growth of bush/blocking access/fire management/fire hazard	8
water quality in creeks/sewage disposal	7
undefined/eroded walking tracks	7
introduced animals/rabbits/foxes/cats	6
dune preservation/sand erosion	6
hooligans/antisocial behaviour	5
bush regeneration	4
holiday parks encroach	4
4wds/vehicles	4
overuse/over population in holiday parks	4
camp fires/beach fires	3
poor maintenance/deterioration	3
tractors/4wds on beach	3
boat ramp dangerous	2
glass on beach	2
too many kangaroos	2
camping	2
exotics planted adjacent holiday park	1
protection of wetlands/creeks	1
protection of aboriginal sites/geological sites	1
campers damaging trees	1
dangerous debris from old sawmill	1
building encroachment/houses to close	1
vehicles on nature strip	1
repair breakwater	1
clean out creek at Merry Beach	1
van park patrons parking	1
stormwater drainage into Butlers Creek	1
99 year lease to holiday park	1
periodic consultation	1
dead seals	1

old septic tanks	1
drug plantations	1
remove dead trees	1
feeding of wildlife	1

Question 6. What facilities should there be?

Comment	Number of respondents that mentioned it
As is/no more than now/none	31
walking tracks/paths/walkways/stabilise/defined/rationalised/nature walks/signposted	29
picnic areas/BBQs	25
toilets	22
seats	18
rubbish bins/recycling	17
better parking/parking at boat ramp/parking at Butlers Ck	17
tables	16
retain/improve boat ramp	8
fish cleaning tables	6
No more picnic areas/BBQs	5
water	5
steps/walkways to beach	4
information panels/history/aboriginal/nature	4
volunteer lifeguards/surf club	4
beach shower	3
improved access to Kioloa Beach	2
viewing areas	2
shade trees	2
park	1
no more toilets	1
subtle signage	1
extend breakwall	1
extend coastal patrol	1
no swimming signs at ramp	1
signs re dog droppings	1
signs re public land	1
signs re bluebottles	1
ranger station	1
similar to national park	1

7.4 Appendix 4 – Kioloa Beach Holiday Park Reserve

The area occupied by the Kioloa Beach Holiday Park is leased from the NSW Government (area 1 in Figure 2). It is part of Crown reserve R96797 for Public Recreation. The land to the east and north of the holiday park (area 2 in Figure 2), outside the fenced area of the holiday park, makes up the rest of reserve R96797. It managed by the holiday park operator under a licence from the Government, but it is used by the general community for recreation, parking and access to the beach. It has important coastal vegetation on the dune and creek bank, as well as a small patch of spotted gum forest. The current holiday park operator has made significant improvements to the management of the area.

Although Council has not carried out maintenance of this reserve in the past, the Department of Lands has approached Council about being appointed as Trust Manager for the reserve. Under this proposal, the Department of Lands would continue to have management responsibility for leased areas that are occupied by the holiday park.

Council has declined to take over management of this area because of concerns over sewage effluent disposal, degradation of northern part of the site, degradation of the dune system and public access issues. Council considered that funding needed to be allocated for restoration and ongoing maintenance. Council also considered that community opinion should be sought on possible management regimes.

At the community workshop held as part of the process for development of this plan of management, the community were asked who they thought should manage the reserves and why. Some people thought that the Kioloa Beach Holiday Park should continue to manage (care take) its area (outside fence) as is, while others thought that the area should be managed by Council, provided it is maintained to current or better standards than existing.

In the first place, it is recommended that the Department of Lands review and, if necessary, enforce the conditions of the lease for the holiday park as they relate to the adjacent reserve areas, and negotiate appropriate licences with the holiday park operator for use and maintenance of the reserve. Such licence negotiations could include requirements that the holiday park operator prepare and implement a management plan for the licensed land. Council could then reconsider taking on management responsibility for the area outside the holiday park if the standard of the reserve reaches an acceptable level in terms of public access, coastal dune protection, native vegetation protection, revegetation and creek bank protection, car parking, etc.

The following sections provide information on some of the management issues that relate to this Crown reserve.

7.4.1 Sewage Effluent Disposal

The current holiday park operator has made significant improvements to both the quality and quantity of sewage effluent that is disposed of to absorption

trenches in the reserve (see photo). The sewage effluent has been greatly improved in quality by construction of a new treatment facility in the holiday park. It has also been reduced in volume by effluent reuse.

Council environmental officers recently approved the upgrade to the sewage treatment and disposal system at the Kioloa Beach Holiday Park. A condition of the approval required that the system be operated without use of the northernmost trenches for a trial period to see whether or not they are required in the long term.



7.4.2 Maintenance

The proprietor of Kioloa Beach Holiday Park mows the grassy parts of the reserve, removes litter and removes unsafe limbs from trees. This could continue under license. There are also maintenance requirements for structures such as fences, bollards, signs and walking tracks.

7.4.3 Facilities / Showers.

There are a number of freestanding shower heads on the grassy area behind the beach. Water to shower heads is provided by the Kioloa Beach Holiday Park. There is wind sock that is used by helicopter pilots that land from time to time near the coastal patrol or elsewhere.

7.4.4 Use of Reserve by Kioloa Beach Holiday Park Patrons.

In peak holiday times, patrons of the Kioloa Beach Holiday Park use the reserve east of the leased area intensively. Uses include relaxing and playing games, accessing beach, drying towels and clothes, etc. Some of this activity results in equipment such as seats, tables, barbecues, bicycles, hammocks, swings, washing lines, etc being spread through the reserve (see photo). Whilst most of these uses are appropriate for a recreation reserve, there may be a tendency for some camp sites (though not tents) to spill out of the holiday park and exclusively occupy parts of the reserve. Equipment should not be “stored” in the reserve for the duration of patrons’ holidays.



7.4.5 Beach Access and Dune Protection.

There is pedestrian access to Kioloa Beach at various points across the dune to the east of the holiday park. Patrons of the holiday park simply walk across the reserve from the park. For residents from the village of Kioloa access to the beach is freely available to the north of the holiday park and the park operator allows access through the main entry of the park. Residents of the village have apparently had informal access through the whole of the holiday park to the beach in the past, but this is no longer available.

The dune area between the ocean and the Kioloa Beach Holiday Park does not appear to be undergoing long term recession and there have been improvements to native vegetation management on the dune. However there

are areas of localised vegetation loss and consequent erosion, particularly at Butlers Point. Currently, there is some control over which parts of the dune are used by people to access the beach, with some fencing, boardwalk and signage installed and maintained by the proprietor of the Kioloa Beach Holiday Park. Despite this limited control, people tend to use obvious tracks to the beach, some of which have structures associated with them and some of which do not. Some further rationalisation and rehabilitation of duplicated and unnecessary tracks, by installation of fencing, viewing platforms, walkways and revegetation is appropriate.

7.4.6 Weeds.

There is a range of weed species present amongst the diverse native vegetation on the reserve. The infestations are not exceptional in relation to Citywide trends.

7.4.7 Dumped soil

Many piles of clay were dumped throughout the northern part of the reserve some time ago. Where left undisturbed, native vegetation has slowly begun to re-establish on this material. The cost and environmental disturbance that would be caused by an attempt to remove the clay are considered to outweigh any benefit that may be gained. However if some areas have vehicle access restricted then further stabilisation of the material could be achieved.

7.4.8 Northern Car Park

This is the area between the northern boundary of the Kioloa Beach Holiday Park and Butlers Creek. During summer, the area is heavily used as a car park and pedestrian access way for people going to Kioloa Beach (see photo). The area is also used for parking by patrons of the Kioloa Beach Holiday Park. There are many dirt vehicle tracks and near the creek, it appears that people use the area for wheel spins and other unsafe and damaging driver behaviours (see photo). Uncontrolled vehicle and pedestrian access has led to vegetation damage, soil compaction and soil erosion. There is poor access for pedestrians with low levels of mobility and those with children in strollers. In busy times, there could be some conflict between pedestrians and drivers. There is a need for some rationalisation and rehabilitation of duplicated and unnecessary vehicle tracks, by installation of bollards, with ripping and planting where necessary.



7.4.9 *Creek Bank Erosion*

In the northern part of the reserve there is a section the bank of Butlers Creek that is undergoing unnatural erosion (see photo). This is caused by swimmers climbing up the bank from the creek. There was a rope swing on a dead tree at this location but it has been removed. Revegetation of creek bank and diversion of storm water away from eroding area would be appropriate.



7.5 Appendix 5 – Kioloa Sawmill Heritage Inventory Extract

Shoalhaven Heritage Inventory		SHI Number 2390447
Item Name: Kioloa Sawmill & Wharf (former)		
Location: off Murramarang Road, Kioloa		
Address: off Murramarang Road	Corner:	
Suburb / Nearest Town: Kioloa 2539	State: NSW	
Other/Former Names: Bawley Point Saw Mill		
Area/Group/Complex:	Group ID:	
Local Govt Area: Local Government Area: Shoalhaven City	DUAP Region: Illawarra & Macarthur	Historic region: Illawarra
Property Identifier: Lot 24 DP 755941 (Por 24)		
Boundary:		
Item Type: Archaeological-Terrest	Group: Forestry and Timber I	Category: Sawmill
Owner:		
Owner Codes: KI011P	Code 2: 38598	Code 3: Y
Current Use:		
Former Uses:		
Assessed Significance:	Endorsed Significance:	
Statement of Significance:	High potential archaeological significance through its association as being the largest sawmill for its time(1883) in the southern hemisphere. Local Significance (Shoalhaven). Further investigation may warrant high significance.	
Historical Notes or Provenance:	<p>In 1883 Goodlet & Smith established a mill at Red Head. The mill manager was William Pearson and 30 men were employed. The mill had a 25 horse power engine, breaking down frame, 3 circular saw benches, and a shingling machine. In 1884 the mill was moved to Kioloa. It set up near the present boat ramp, at the south end of Kioloa beach. The millhands lived close to the mill. The first mill ceased operation after a boiler tube burst in 1893. After letting the mill lay idle for seven years, Goodlet & Smith disposed of all the buildings, timber carriages and other fixings locally, then shipped most to the mill machinery to Sydney.</p> <p>It was not until 1912 that milling resumed at Kioloa, with a new mill owned by Hepburn McKenzie. It was described at the time as the largest sawmill in the southern hemisphere, and was capable of cutting up to 100000 super feet of timber each week. It was destroyed by fire in 1916, but re-built soon after and operated until the buildings were destroyed by another fire about 1926. Operation in this period was not full-time. The mill closed due to log shortage in 1918, and for unspecified reasons in 1916 and 1922. The mill was closed at the time of the 1926 fire. The machinery was then moved to Coramba near Coff's Harbour, where it operated for another thirty years.</p>	
National Themes:		

Date: 12/08/2005

Full Report

Page 1

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Shoalhaven Heritage InventorySHI Number
2390447Item Name: **Kioloa Sawmill & Wharf (former)**Location: **off Murramarang Road, Kioloa**

State Themes: Environment

Study Themes: 9.1 (Timber getting) 9.1.1 (Saw-Milling)

Designer:

Maker / Builder:

Year Started:

Year Completed:

Circa: No

Physical Description: Little remains of the original wharf and sawmill. The only visible evidence is a number of concrete foundations which are presumably of the original wharfs, they are located on the beach front. It is highly likely that through archaeological surveys additional evidence would be revealed both on land and in the water.

Physical Condition:

Modification Dates:

Recommended
Management:

Further Comments:

Historical Significance:

Aesthetic Significance:

Social Significance:

Technical / Research:

Rare Assessment:

Representativeness: This item is assessed as aesthetically representative locally. This item is assessed as historically representative locally. This item is assessed as socially representative locally.

Integrity / Intactness:

References:	Author:	Title:	Year:
	V B Hamon	They Came to Murramarang	

Studies:	Author:	Title:	Number:	Year:
	Peter freeman P/L	Shoalhaven Heritage Study	KI011P	1999

Listings:

Related Items:

Listing Comments:

Custom Field Three:

Date: 12/08/2005

Full Report

Page 2

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