

The Ecology Lab

**NSW Commercial Abalone Draft
Fishery Management Strategy:
Assessment of Impacts on Heritage
and Indigenous Issues**

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1.0 INTRODUCTION

A draft fishery management strategy (FMS) for the commercial fishery for abalone in NSW (known as the Abalone Fishery) is being prepared. Concurrent with the preparation of the FMS, there is a requirement to prepare an Environmental Impact Statement (EIS) to accompany a Part 5 development application for the continuation of the fishery.

Commercial fishing for blacklip abalone (*Haliotis rubra*) commenced in 1965. The species is found on rocky coastlines from the NSW/Queensland border around the southern fringes of mainland Australia, to Rottnest Island off Western Australia. Abalone is abundant on the far south coast of NSW. Abalone lives on subtidal reefs from shoreline rock platforms to depths of 100 metres. The majority of abalone is found under boulders or in cracks and fissures within the beds of macroalgae in shallow waters (i.e. 0-20 metres). The Abalone Fishery is concentrated on the far south coast of NSW, with major ports located at Ulladulla, Batemans Bay, Bermagui, Tathra, and Eden. Most of the commercial catch is now sourced south of Eden, and there has been a significant decline in the total allowable commercial catch (TACC) for abalone in recent years.

Generally, abalone are taken through diving with compressed air supplied through a hookah unit, although in some cases scuba or free diving may be employed. A typical commercial operation consists of one diver and one deckhand. Abalone is removed from the reef using a chisel shaped abalone iron. The catch is placed into mesh bags and buoyed to the surface using an inverted canvas or plastic bag ('parachute').

The Abalone Fishery is a share management fishery. Fishing is controlled through a quota management system which caps the commercial catch by imposing a TACC. Other management methods include seasonal and area closures, minimum legal size limit, and a possession limit for the recreational sector. These catch limiting strategies are intended to maintain sustainable stocks of abalone.

In addition to the commercial sector, abalone is harvested by recreational and Indigenous fishers and is regarded as a traditional food source by Aboriginal people. No Aboriginal people currently hold shares in the Abalone Fishery.

This report presents an assessment of the potential impacts of the operation of the Abalone Fishery on the interests of Indigenous people. *Indigenous interests* encompasses 'archaeology' – sites and places from the past, as well as the maintenance and transfer of traditional knowledge and culture and the well-being of Indigenous people in modern coastal communities. Well-being is taken to include resource access, rights, employment, social justice and community viability.

In addition to addressing these issues at the local community level, the assessment also considers the extent to which the draft abalone FMS will interact with and support the implementation of the NSW Indigenous Fisheries Strategy (IFS) (see **Appendix 1**). Implementation of the IFS is monitored by the IFS Working Group, which includes representatives from coastal and inland Aboriginal communities. Many of the representatives are or have been commercial fishers.

Section 1.1 sets out the requirements for the Indigenous issues impact assessment, as identified by the Department of Infrastructure, Planning and Natural Resources (DIPNR) Directors Requirements. **Part 1** of the assessment report deals with Indigenous issues. **Section 2.1** explains the strategies used to address each of the information and assessment requirements in relation to Indigenous issues.

DIPNR also requires that the heritage impact assessment considers potential impacts on historic heritage sites and values, with particular attention to shipwreck sites. The specific requirement is set out in **Table 1.1**. Historic heritage issues are considered and assessed in **Part 2** of this report.

1.1 DIPNR EIS REQUIREMENTS

The Indigenous and heritage issues that are identified in the DIPNR requirements for the EIS are set out in **Table 1.1**.

Table 1.1 - DIPNR requirements for Indigenous and Heritage Issues

Indigenous/Heritage Issue	Section of Document
Part B	
5(d) Indigenous peoples: Identify the interests of Indigenous people in the resources harvested by the fishery and in habitats that may be impacted by the fishery.	
(i) Identify any important Aboriginal sites/places likely to be affected by fishers operating within the fishery and outline any existing protocols/measures that aim to minimise risk of harm to these sites.	Section 4
(ii) Outline how the fishery interfaces or affects traditional fishing and access to fisheries resources.	Sections 5, 6, and 7
(iii) Outline the implication of the current fishery regime on Indigenous communities' well being, including economics, employment and community viability.	Sections 5, 6, 7 and 8
(e) Historic Heritage: Identify any shipwreck sites or other sites of historic heritage that are affected by fishing activities and outline protocols/measures to minimise risk of harm to these sites.	Part 2
Part E	
3(b) Assess the potential changes in impacts on Indigenous interests and values of implementing the Draft FMS including on:	
(i) traditional fishing and access to fisheries resources and areas of cultural value.	Section 8
(ii) Indigenous communities' well being, including economics, employment and community viability.	Section 8
(iii) the implementation of the NSW IFS.	Sections 7 and 8
Identify whether the risk of impacts on Indigenous interests and values are likely to change (and the potential magnitude of this change) as a result of implementing the management responses in the draft FMS.	Sections 8 and 9
(c) Identify any likely changes in impacts on heritage values as a result of implementing the Draft FMS. Assess whether the risk of impacts on heritage values are changed (and the potential magnitude of this change) by the management measures in the Draft FMS.	Sections 8 and 9

PART 1

2.0 ASSESSMENT METHOD - INDIGENOUS CULTURAL HERITAGE AND COMMUNITY ISSUES

The aim of this assessment is to identify the ways in which the operation of the Abalone Fishery in NSW interacts with the values of Indigenous people and to determine the extent to which the draft abalone FMS addresses any significant impacts or issues that arise from that interaction.

The Indigenous values that are taken into consideration include:

- Aboriginal sites – the physical evidence of past Aboriginal land use;
- Aboriginal places – the locations that are associated with stories about the landscape or with personal and community totemic associations with the natural world. Aboriginal places may also be associated with historic settlements or events;
- Aboriginal cultural landscapes – the places and species in the landscape that are important to Aboriginal people. As a separate issue from Aboriginal places, this refers to the presence and distribution of Aboriginal foods and medicines in the coastal and marine landscape, as well as the association of individuals and communities with country;
- Aboriginal cultural practices and the maintenance of Traditional Fishing Knowledge (TFK). Of particular importance is the cultural practice of individuals hunting and collecting on behalf of a wide family group, including the elderly and very young, and the importance of passing on traditional fishing skills and community values through this process;
- Aboriginal socioeconomic participation in the commercial fishing sector; and
- Indigenous rights and social equity issues in terms of access to traditional resources.

The assessment draws on two principal types of information:

- a review of literature that describes historical and contemporary Indigenous community marine fishing practices, the cultural importance of marine/coastal landscapes and their resources and the extent of Indigenous involvement in the commercial fishery sector. The review also considers documents prepared to support Indigenous rights claims in the coastal zone, and documents that explore the conflicts that have emerged between Indigenous fishers and the commercial sector about the management of the abalone resource; and
- conversations with Indigenous people, including members of coastal Aboriginal communities, Local Aboriginal Land Councils and members of the (NSW Department of Primary Industries (DPI) (formerly NSW Fisheries) IFS Working Group about community fishing practices and issues associated with the harvesting of abalone.

These two types of information – the review of studies of Indigenous community fishing practices and consultation with community members about the role of fishing in their cultural responsibilities, are the principal components of the assessment.

Although there have now been several detailed local studies of Indigenous landscape resources in coastal areas of NSW, the information about the relative and absolute cultural value of Indigenous community fishing is still patchy.

2.1 COMMUNITY CONSULTATION AND PARTICIPATION METHODS

The current study process involved attempted to provide broadly inclusive opportunities for Indigenous community representatives to provide input about cultural practices, cultural values and culturally appropriate management strategies for the fishery.

Consultation activities included:

- Discussion with DPI officers working on the NSW south coast and in aquaculture development.
- Distribution of information to all Local Aboriginal Land Councils along the NSW coast. The information was distributed to Land Councils with an invitation to provide comments and ideas for effective participation of Indigenous people in the sustainable management of the Abalone Fishery.
- The written information was followed up with phone calls to Land Councils and other community organisations, seeking input about values, cultural associations, appropriate people to consult, issues and conflicts from the community perspective.
- Face to face meetings with Land Council members were not conducted specifically for this assessment. However, during meetings held at regional Land Council offices on the north and south coasts, early in 2004, as part of consultation about the management of the lobster fishery, community members also raised concerns about the management of access to abalone resources. Both lobster and abalone are species with high commercial value, and are also considered to have high traditional cultural value. Both species have closely restricted bag limits and catch quotas, to protect and sustain the resource, and both are subject to illegal commercial and recreational catches (see **Section 7**). The Indigenous community concerns about access to these fisheries are, in general terms, very similar.
- A briefing was held in Sydney with the IFS Working Group on 24 June 2004. The scope of the briefing is presented in **Appendix 2**. Broadly, the briefing addressed the concepts and requirements included in the scope of the assessment process, the current level of Indigenous participation in the Abalone Fishery (as recreational fishers only, except in specific cultural situations) and the types of management responses being considered in the draft FMS. Details about the discussion at this meeting are included in **Section 5**.
- One of the matters discussed with the IFS Working Group was the range of opportunities for input to the assessment process and to the preparation of the draft IFS, as well as opportunities to comment on the exhibited documentation later in the process. In particular, the concept of an 'Indigenous Expert Panel' to provide input on individual fisheries was discussed and strongly supported. In this context, IFS Working Group members recommended that a meeting should be convened on the NSW South Coast to explore issues and potential management responses in further detail. The outcomes of this expert panel discussion would form an important part of the assessment process. In turn, the overall draft FMS and Indigenous issues section of the EIS would be presented to the IFS Working Group. At this meeting, the IFS Working Group would endorse the management recommendations presented, or would offer suggestions for fine tuning. After the Sydney meeting, there were detailed discussions between members of ABMAC, DPI and the EIS consultants about the feasibility of convening the proposed south coast meeting. Agreement amongst the stakeholders could not be reached about this meeting and this assessment is therefore based on the comments made in the earlier components of consultation.

This consultation has revealed a number of important issues to be addressed in the draft FMS (see **Section 5.0**), but has also highlighted a particular need for DPI to support a culturally

appropriate consultation process during the development of all fishery management strategies, including the concept of an Indigenous Expert Panel.

Factors that should be taken into account in future consultation between DPI and the Indigenous community about the management of coastal fishery resources include:

- A strategy to seek input across the whole Indigenous community. Although Local Aboriginal Land Councils do represent local Aboriginal community interests, in many areas only a relatively small proportion of the total Indigenous population are members of the Land Council. In addition, Land Council communication processes and decision making processes can be very slow, so that not all members have an opportunity to contribute their views. Consideration should be given to advertising the preparation of the draft FMS in the Koori News and in local newspapers, as well as forwarding information and invitations to contribute to the widest range of Indigenous community organisations along the coast. This broad scale canvassing of community views would be supported by discussion with the Indigenous Expert Panel, whose members would be identified through the IFS Working Groups and people who expressed interest in the project.
- A strong community preference for face to face discussion (i.e. verbal presentations and discussion opportunities), where people can share ideas and feedback rather than a more remote, written consultation process. The Indigenous Expert Panel concept addresses this preference.
- An ongoing distrust of DPI in relation to the management of broader aspects of Indigenous community fishing practices, involvement and exclusion.
- The (as yet) poorly developed feedback mechanisms for input to the assessment process for fishery management strategies generally, so that representatives of local Aboriginal communities can see how the information or ideas that they have provided have been used or adapted in the assessment and management process. Clearer feedback will give communities confidence that their effort in providing input is worthwhile. It is anticipated that the activities of the IFS advisory committee will greatly improve two way communication and networking about Indigenous issues in fishery management. Nonetheless, a participation program for each FMS and EIS that allows regional communities to see the outcomes of their input (before an FMS is approved) is desirable. This should be considered in association with measures to enhance Indigenous community participation in the fishery management advisory committees (see **Section 5.5**).

3.0 STRUCTURE OF THE INDIGENOUS ISSUES ASSESSMENT

As noted in **Table 1.1**, the scope of the assessment of Indigenous issues relates both to the archaeological evidence of past associations with coastal country and resources and to contemporary social, economic and culturally based equity issues. **Section 4** of this report discusses the types of archaeological evidence that are present along the NSW coast. **Section 4** also discusses marine totems identified by Aboriginal people.

It is important to note that coastal midden sites contain remains that illustrate *some* of the past food preferences of Aboriginal people i.e. fish and shellfish species that were harvested from the sea and estuaries. The commercial abalone sector has very minor land-based operations that could potentially impact on the integrity of archaeological sites. The majority of the activity in the commercial sector is conducted offshore and at considerable depth. There is very little potential for the abalone diving activities to impact on Aboriginal archaeological sites. As discussed in **Section 4**, the risk of impacts on Aboriginal archaeological sites can be managed through simple communication protocols.

The species distribution in Aboriginal midden sites also indicates that most of the commercially targeted species in NSW, including abalone, were part of the traditional Aboriginal resource base. Aboriginal community fishing continues to maintain a preference for these species.

Fundamentally, the Indigenous community issues associated with the operation of the Abalone Fishery come down to progressive loss of access to resources, with Indigenous communities considering that their right to maintain traditional fishing practices (i.e. fishing for traditional cultural and community purposes and responsibilities) conflicts with the current licensing system and allocation of access to abalone resources.

Section 6 of the assessment reviews available information about the social, economic and cultural context of marine fishery management in NSW, with reference to the participation of Indigenous people through the recreational sector and for special events to meet family responsibilities. The results of this review are strongly supported by the results of consultation with Aboriginal families from the NSW south coast and the IFS Working Group. **Section 5** discusses consultation options used in this assessment and the results of conversations with Indigenous community representatives about the impact of current fishery regulation on Aboriginal people.

Section 6 reviews a series of recent studies and reports which show strong and consistent themes, including:

- the importance of fishing as a dietary supplement and a means to independence for coastal Aboriginal people;
- the importance of cultural responsibilities;
- the conservation philosophy of Indigenous fishers; and
- fishery practices and preferences revealed by recent surveys.

Not all of the matters raised by Indigenous community representatives can be addressed by the draft abalone FMS in isolation. Some issues require significant changes in fishery policy in NSW for a solution satisfactory to the Aboriginal community to be achieved. The assessment presented in **Sections 8** and **9** takes the scope of the draft abalone FMS into account.

4.0 THE ARCHAEOLOGICAL RECORD

Archaeological evidence clearly indicates that shellfish gathering was of great importance to Aboriginal people in pre-European times. The evidence also suggests distinct differences in the styles of accessing the coastal fishery resources on the north and south coasts (e.g. in terms of seasonality and targeted species). Sullivan (1982) attributes these differences in the first instance to significant geomorphic differences between the north and south coasts. The north coast is dominated by long sandy beaches, and large river estuaries, lakes and bays. The south coast is much more a rocky coastline with numerous headlands and rock platforms, smaller estuarine waterways, and shorter beaches that have a geomorphic history of shoreline retreat. This coastal structure affects the frequency with which specific shellfish and finfish species are present in midden sites (but does not necessarily affect the number or size of sites). For example, abalone shells are more commonly found in middens on the south and central coast of NSW than on the north coast.

General features of middens

Sullivan (1982) provides an overview of the archaeology of shell midden sites along the NSW coast. Although a number of middens have been further investigated since that time, most of Sullivan's conclusions remain unchallenged. Key aspects of the archaeological evidence from middens are noted below. These features provide abundant evidence of the importance of the shellfish resource to Aboriginal people, and also point to changing technological and social organisation over time to enhance the fishing return. Most midden deposits on the south coast contain a variety of fish and shellfish remains, including fish bone, robust marine shell species such as abalone, but also estuarine species (middens often reflecting occupation within the coastal zone, rather than a specific open coast or estuarine resource).

Key aspects of the archaeology NSW coastal midden sites include:

- In excess of 1500 midden sites have been recorded along the coast, primarily as open sites. In the Sydney region, a relatively high proportion of middens are situated in rock shelters, reflecting the relative abundance of cavernous overhangs close to the shoreline.
- The largest estuarine middens in NSW are located in the Macleay Valley (Clybucca and Stuarts Point). These mounded midden sites are estimated to contain 150,000 to 200,000 cubic metres of material, being up to 4 metres high and several kilometres in length. Similar large middens are also known from the Richmond and Clarence valleys.

Despite the large volume of oyster shell in these sites, McBryde (1982) estimates that the oyster component in the big middens on the north coast is considered to have provided only 0.1% of the dietary requirements of expected groups visiting the site over the dated period of occupation (approximately 2000 years). McBryde concludes:

- the diet was likely to have been a mixed one and the archaeological evidence overemphasises the shellfish component;
- the period of occupation in any one year was likely to be short, and as hunting and fishing were still practised, the nineteenth century observers could well have missed the significance of shellfish gathering;
- the evidence indicating that occupation was brief and periodic strongly suggests seasonal occupation, i.e. a segment of an economy exploiting different resources at different times of the year; and

- the shellfish gathering, fishing and hunting economy documented for the site could be an important element in the total annual diet, a refreshing change in activities and food components. Shellfish could be important in this change, even though not providing a high return in terms of energy.
- Mounded middens are also found on the south coast, for instance at Pambula (these are relatively well preserved), at Wagonga Inlet, Wallaga Lake and Sussex Inlet. Smaller middens are widespread from the mouths of estuaries to the upper reaches. The mounding of midden sites may have been for cultural reasons rather than for any environmental reason. Sullivan (1982) refers to midden mounds as markers of good places to return to in the landscape, plus a concept that keeping the waste shell together would encourage more shellfish at that location.
- Estuarine shellfish species comprise approximately 50% of the shell in middens along the coast. On the south coast, rock platform species are more common, reflecting the higher incidence of headlands. Beach pipi middens are common on the north coast, but many of these have been destroyed.
- Middens on the south coast tend to be sheltered by headlands and also tend to face to the north and east. In the Clarence Region of the north coast, sheltered middens tend to be located on the western side of dunes. (Note the relatively low frequency of headlands on the north coast, when compared with the south coast). The aspect of sites also reflects winter wind directions and possible seasonality of occupation.
- Midden sites are often located close to supplies of fresh water, such as tributary creeks, springs, fresh ponds in coastal deflation basins and wetlands. Sullivan suggests that 80 to 90% of all midden sites are within 200 metres of a water supply, although occasional very large middens, containing entirely shell, are more than 500 metres from fresh water.
- Coastal midden sites provide evidence that they were clearly used in summer, but the evidence for winter use is less definitive. Species that are present in midden sites could have been available all year round.
- There is a tendency towards increasing variety of fish species and sizes in the upper layers of sites. Several authors suggest that this is due to the introduction of new fishing technologies (particularly line fishing) over time. Dates for fish hooks are all less than 1000 years. On the south coast, there is a clear change towards hairy mussel and edible mussel in the last 1000 years.
- Human burials have been reported from midden sites right along the coast. Sullivan suggests that many of these burials, which include males and females (adults) and children, are relatively recent (last 200 years). Wherever they occur, and whatever their age, the presence of a burial in a midden deposit is highly significant to the Aboriginal community.
- Many midden sites have been destroyed by European land uses, with substantial destruction in the early years of colonisation when middens were exploited as a source of lime. Pipi middens along the coast may also be relatively underrepresented in the archaeological record, because many have been destroyed by mining and by coastal erosion and dune transgression processes.

Abalone in south coast middens

Colley (1987) highlights the difficulties of interpreting Aboriginal economic activity from the remains that are preserved in midden sites, particularly in relation to catch composition and seasonality. Factors include differential preservation of various materials (both plant and fish/shellfish), and the broad seasonal spectrum of some species.

Contributing to differential preservation of some species in midden sites would have been cultural preferences for harvesting and processing individual species. For instance, Ossie Cruse (in Cruse, Stewart and Norman 2005) describes how mutton fish (abalone) was always shelled and pounded on the rock platform immediately after harvesting. Only the meat was taken away for cooking at the main camp, with most shells left on the rock platform, where they would later be washed back into the sea rather than incorporated into the archaeological record.

Colley (in Cruse, Stewart and Norman 2005) discusses the presence of abalone shell (also known as mutton fish or walkom) in midden deposits that she has excavated in the Disaster Bay and Wonboyn area. These sites provide archaeological evidence of the transition from the pre-European Aboriginal lifestyle on the south coast, to the historical period. The stratified middens have abalone shell throughout. Radiocarbon dates from the sites indicate that they span a period of about 600 years, with the uppermost layers containing not only shellfish remains and flaked stone artefacts, but artefacts manufactured from fragments of nineteenth century bottle glass.

Egloff (1981) refers to abundant archaeological evidence of Aboriginal fishing and shellfish gathering along the shorelines at Wreck Bay, with extensive middens containing shellfish, fish hooks (using shell), edge ground axes, bone points and flaked stone implements. Axe grinding grooves, open campsites, bora rings and burial sites are also reported from the Beecroft Peninsula, indicating a well established population with tools and strategies to work with diverse local marine and terrestrial resources.

Egloff describes fishing by men using spears that had hard wood prongs tipped with bone points. These spears were used in Jervis Bay and in the shallow coastal waters over rocky reefs. Women also fished using hook and line. Species represented in the midden sites include snapper and bream, as well as pipi and cockle and occasional abalone.

Anecdotal evidence suggests that on the south coast of NSW, subsistence activities at beach camps and around mission or reserve sites on the coast, continued to add to beach and rock platform midden deposits until at least the mid twentieth century.

4.1 INTERACTIONS BETWEEN THE ABALONE FISHERY AND ARCHAEOLOGICAL SITES

In general, the physical evidence of past Aboriginal occupation along the NSW coastline is most severely threatened by land uses and activities other than abalone fishing. For example, many large midden sites along the coast (principally on estuarine shorelines) were exploited for lime in the nineteenth century, and sometimes also for road base. Many sites have also been destroyed by agricultural land uses, and urban and tourist development. Today, many sites continue to degrade because of natural processes such as wave and wind erosion which is difficult to halt.

The overall risk that activities authorised by the draft abalone FMS will detrimentally impact on Aboriginal cultural heritage material (i.e. archaeological sites) along the NSW coastline is considered to be small. Commercial abalone fishing is generally undertaken from a boat by divers using breathing apparatus. This diving and collecting is unlikely to affect archaeological sites because such sites are generally located on the shoreline rather than in the subtidal zone.

The fishing operation, however, does have the potential to impact archaeological sites when the subtidal zone is being accessed. Boat ramps and car parks may be located in areas where Aboriginal archaeological sites are commonly located. Many of these facilities were constructed before there was an awareness of archaeological issues. However, commercial fishers access the coastline via access routes that have been endorsed by local Councils and National Parks and Wildlife Services (NPWS). It is assumed that in agreeing to continuing access to such routes, NPWS has considered the risk that ongoing vehicle access may have on archaeological sites.

4.2 PROTOCOLS TO REDUCE IMPACTS TO ARCHAEOLOGICAL SITES

While the risk which commercial abalone fishing poses to archaeological sites is considered to be low, the extent of the risk will vary from location to location. The definition of the risk for an individual location will depend heavily on the availability of local knowledge (e.g. provided by discussions with local Aboriginal people and local NPWS officers).

Where potential impacts on Aboriginal sites are known to exist, it is important that they are addressed by liaison and management actions at the local level. This will ensure compliance with the requirements of the *National Parks and Wildlife Act 1974* (NPW Act), and will also enhance co-operation and understanding of cultural concerns. An example is the presence of Aboriginal cultural heritage material at the boat ramp at Yarrawarra. This ramp is also adjacent to a stone structure considered to be an Aboriginal fish trap.

Several management actions are proposed to ensure that risks to archaeological sites are minimised. These include:

- Consultation with local Aboriginal community representatives in relation to any proposed commercial fishery facility that would be located on an ocean shoreline. This would include maintenance of existing ramps, new launching ramps and regional boat storage or maintenance sites. In general, such facilities will require separate environmental assessment and development consent including assessment of potential impacts on Aboriginal cultural heritage.
- Preparation of cultural awareness information for holders of abalone endorsements. In particular, these operators should be aware of the nature and location of midden sites along the coastline, and that such sites are protected by the NPW Act.
- Ongoing consultation with local Aboriginal communities about developments in the commercial sector. This will occur, for instance, through Aboriginal representation on regional management advisory committees (MACs).
- Inclusion of clauses to protect Aboriginal cultural heritage within the Abalone Code of Conduct. For example, the Ocean Haul Code of Conduct, while not specifically identifying cultural heritage, states that “*Endorsed fishers will comply with local Council and NPWS bylaws*” and “*Endorsed fishers will use local Council or NPWS approved access points*”.

4.3 ABORIGINAL PLACES AND COMMUNITY STORIES

English (2002) discusses the reasons that places associated with ‘wild resources’ are valued by Aboriginal communities and highlights eight primary factors (based on experience with the Yarrawarra community on the north coast). He notes that these places may be associated with:

1. *“past family, group or individual activities that are remembered by the participants or because they feature in stories passed down through generations;*
2. *a highly valued type of food or medicine that is still highly sought by people today or else remembered as an integral part of people’s life and knowledge systems;*
3. *a species that has totemic significance or which features in a story or tradition;*
4. *independence and self reliance in the face of economic and social hardship;*
5. *the concept of past of continuing interaction with the landscape in a way that affirms cultural identity;*
6. *physical remains such as middens, scarred trees, or tin huts that bear witness to people’s long term and continuing association with the land;*
7. *enjoyment of the land gained through having access to personal and group space in which to reflect and carry out enjoyable activities such as fishing;*
8. *people’s custodial interests in land that are maintained by continuing use and the opportunity to observe change in the landscape’s condition.”*

These eight factors highlight the complexity of Indigenous community relationships to fishery resources and their views about appropriate sustainable management practices. Similar patterns of resource relationship are repeated right along the coast, although details clearly change from one social grouping to another and with the specific environmental resources that may be available in different areas (e.g. the differences between the long sandy beach coasts of the north and the rocky embayments of the south).

Aboriginal people attribute cultural value to some coastal features because of their spiritual associations. Some of these features are listed as Aboriginal Places and have status under the NPW Act (an example of this type of feature is Goanna Headland at Evans Head), but many are not well documented and are not formally identified as Aboriginal Places.

For example Mick Leon (pers. comm. 2003), from the mid north coast of NSW, noted that there was a story that Julian Rocks near Byron Bay were thought to be connected in a spiritual way to Seal Rocks. People could travel spiritually between the two places and come out at either end.

4.4 ABORIGINAL MARINE TOTEMS

The traditional social structure of Aboriginal communities includes familial or totemic relationships to natural features, plants and animals. Faulkner (2000) notes that a *“general characteristic of Aboriginal totemic relationships was the basic tenant of not consuming one’s totem, and taking some degree of responsibility for its survival”* (p3). In some cases, the relationship was expressed in terms of ceremonies at particular sites (increase sites) to ensure the continuation of the species. For example, Radcliffe-Brown, in Schnierer and Faulkner (2002), recorded a bream increase site on the lower Clarence River for the Yaegal people.

Some totems were marine species and many were coastal species, but the full range of totems from the NSW coast, and the variations between groups along the coast, has not been documented. No records of a totemic relationship with abalone have been reported. Notwithstanding this, it is apparent that the values associated with totems would have encouraged Aboriginal people to manage their marine resources carefully, to protect both economic and spiritual values.

Rose, James and Watson (2003) discuss Indigenous kinship with natural features in NSW, drawing on case studies from Wallaga Lake (Yuin people) on the south coast, and from the Ngiyampaa people in western NSW. The Yuin people's stories provide some guidance about the spiritual associations and values that Aboriginal people may have with marine species. The black duck is a very important totem species for the Yuin people and many of the other species that are noted as having totem value are terrestrial species from the mountains and forests of the south coast. More relevant to the current assessment of ocean trawl fishery impacts are stories from the Yuin people about their relationship with dolphins and whales and of the sanctuary value of Little Dromedary Island (Najanuga) and Montague Island (Barunguba). Both islands are off the NSW Far South Coast and are passed by commercial fishing vessels (as well as recreational vessels and other commercial vessels) on a regular basis.

“Gulaga was and still is a protection area for all sorts of plants, animals and birds. ...in the video “Sites we want to Keep” the late Guboo Thomas stated that the name Najanuga means “powerful home”. The significance of Najanuga as a resource site for birds eggs is documented there as well as by Kelly (1975:4). According to the late Guboo Ted Thomas, birds were protected in the area around Najanuga; only old people gathered eggs from Najanuga and they always took a limited number. Najanuga is thus one of the original bird sanctuaries on the continent.”

(Rose, James and Watson (2003:47))

The killer whale (Yeerimbine) is identified as a totem south of Twofold Bay. The relationship between some Yuin people and killer whales at Twofold Bay has been widely reported because of the importance of the collaboration to the whaling industry.

“A number of Yuin people participated in the industry by calling killer whales to herd smaller whales in toward shore so that they could be harpooned by the ships stationed there. The killer whales were rewarded by being fed the tongues of the harpooned whales. Three people with whom Christine (Watson) spoke added that Yuin involvement in the whaling industry was an adaptation to the presence of white people as whales are an important animal in Yuin culture which traditionally should not be killed.”

(Rose, James and Watson (2003:48))

“There was also collaboration with dolphins. The late Guboo Ted Thomas, on his tape The Dreamers, recounted an early memory of his grandfather singing songs, hitting the water with a stick and dancing on a beach down on the south coast, calling the dolphin to bring fish in to shore for them to eat.....Guboo said that he could still sing the songs and described another time when a dolphin brought a big bream to shore for him.”

(Rose, James and Watson (2003:48))

“Yuin women were also able to communicate with dolphins. There is a story that women from Brou Lake would hit on the water, and speak to the dolphins when they swam up, giving them messages to transmit to men on Montague Island.”

(Rose, James and Watson (2003:48))

This relationship or partnership with dolphins appears to have been quite widespread along the coast. Faulkner (2000) refers to a documented tradition of dolphins assisting Aboriginal people to fish on the beaches in the Yaegl territory at Yamba. Mick Leon (pers. comm. 2003), from the

mid north coast, noted that dolphins and turtles are considered as ‘brothers’ at that part of the coast, but whales are not.

The Gumbaingirr people on the mid north coast (English 2003) also tell of people calling to the dolphins from the headland at Corindi. Faulkner (2000) refers to a similar relationship in the Moreton Bay region, at Bribie and North Stradbroke Islands.

4.5 THE ROLE OF FISHING IN THE CULTURAL LANDSCAPES OF COASTAL AREAS

English (2002) reports the results and implications of a detailed study of Aboriginal wild resource use on the NSW mid north coast. The study was conducted with the Gumbaingirr people, based at the Yarrawarra Aboriginal Corporation at Corindi Beach. Gumbaingirr people have lived in camps and villages near Corindi Beach since the 1890s. The project reported by English sought to map the patterns of natural resource use described by the current Indigenous residents of the area. The patterns that are described reflect the changing lifestyles of Aboriginal communities from the 1940s to the present. Whilst these patterns, which draw on the experience of current community Elders, do not necessarily represent activities extending to the late nineteenth century or earlier, they do highlight the importance of different types of resources to this community. The study also clearly demonstrates the continuity of attachment to the land. Even though young people in the Yarrawarra community do not use all of the places that were once important for community subsistence, they continue to express an interest in and connection to these places.

The wild resource use that is reported by English clearly demonstrates the diversity of resources that were important, and also suggests a strong focus on the nearshore, estuary (Corindi Creek and Lake) and terrestrial resources, rather than offshore. This partly reflects the social importance of subsistence activities, with Gumbaingirr Elders reporting how important it was that everyone took their turn and worked together to provide the food and medicines needed for the community.

5.0 INDIGENOUS PERSPECTIVES ON THE MANAGEMENT OF THE ABALONE FISHERY

5.1 CONSULTATION OUTCOMES

The following matters were raised during consultation with members of the IFS Working Group and conversations with Aboriginal community members from the north and south coasts. The key questions that community representatives were asked to consider included:

- What is the traditional and contemporary value of abalone to Indigenous people? Are there special obligations about sharing this resource in terms of respect or responsibility?
- Are there places where abalone grow or are commercially harvested that have special cultural value to local Aboriginal people, in terms of traditional stories, archaeological sites, totem values or community history. What special management strategies should apply to these areas?
- How does the current management of the Abalone Fishery (abalone resources in NSW) affect Indigenous access to this species? Does the operation of the commercial fishery show respect for Indigenous fishing culture and heritage?
- How can current concerns about access be reduced? Do recreational licence exemptions assist people to meet cultural obligations without breaking the law? Do special permits for cultural events help with bag limit issues?
- What are the main outcomes for Aboriginal people that you would like to see achieved by the abalone FMS?
- How can the participation of Indigenous people in the management of the fishery be improved?

5.2 THE VALUE OF ABALONE TO ABORIGINAL PEOPLE

Aboriginal people want to preserve the stock of abalone, but in some traditionally fished areas, they believe that there is almost no stock available. In other areas, local families who are familiar with the waterways and have fished them for generations know where abalone and other shellfish are available, but they certainly won't be telling DPI or anyone else where those stocks are.

Abalone has different meanings for different areas, and even between different family groups. However, for many groups, especially on the south coast, abalone is more important as a species than any others. There is a documentary that provides information about the spiritual association of Aboriginal people and abalone (mutton fish), and there is a long history of Aboriginal people collecting abalone to feed their own extended family (fishing for Elders) as well as sell a small amount as an income supplement. Abalone would have been a trade item even before European settlement.

Abalone has always been part of the food gathered for big family camps for special occasions on the south coast. Abalone is a highly valued source of food for Indigenous families (used to be known as "black fella's tucker" before the international markets opened up). At big family gatherings of south coast groups, the current bag limits (10 abalone) and permits are seen as an imposition.

Before the introduction of the share fishery and quota system, Aboriginal people were able to collect some abalone as part of their general fishery licences, and had been able to do so for many years. This endorsement has been removed from all general licences so there is no legal opportunity to harvest a small number of abalone for general consumption or sale. Abalone was an important part of the seafood based diet of coastal Aboriginal people for many generations and is seen as an important contributor to community health.

At one time 16 licences were offered to the Aboriginal community through the Aboriginal Lands Trust, but just about all of them were sent back by the Trust. Two others were sold by certain people on the south coast. The IFS Working Group suggested that part of the current difficult situation seems to come from regulators assuming that what was done in the past (without consultation with the community) is still appropriate, and being unwilling to take on various vested interests to provide a way into the industry for Aboriginal people to operate in traditional ways. Aboriginal people would like more respect for their values and greater flexibility in the interpretation of regulations.

5.3 DECLINE IN ABALONE STOCKS

Several people commented that abalone harvests have reduced significantly over the last five years (by up to 100 tonnes per year over the last five years) and they observed that abalone licences are now on the market for about \$700,000, instead of the \$2.8 million that they were a couple of years ago. It was stated that DPI is blaming the decline in reported commercial catch on poaching, but the Indigenous community on the south coast believes the decline is more to do with excess harvesting of breeding stock by commercial divers. Infection with the *Perkinsus* virus was also acknowledged to be an issue. The group also noted that although there has been a lot of publicity about Indigenous “poachers” on the south coast, there are other large scale poachers and black marketers operating in the industry. The amount of abalone taken by Indigenous fishers is small compared to the real black market and merely continues a long tradition of taking abalone for the extended family, plus a bit to sell or trade (see further detail in **Section 7**).

It was suggested that now that abalone licences are relatively cheap, it might be a good time for the Indigenous community to buy into the industry. However, with the current rate of decline, there was some concern that things would get worse, and the industry would take a long time to recover. It was suggested that there would be some merit in buying the whole industry and working towards sustainable reconstruction.

In the shorter term, it was reported that the Indigenous community is looking for access to an isolated reef, where they can restock with a number of species including abalone and sea urchin. There have been some discussions with Victorian fisheries officers about Aboriginal community access to an abalone reef at the NSW/Victorian border (Mallacoota area).

Aboriginal people have previously expressed some interest in buying the sea urchin component of abalone licences, but no-one was prepared to sell this part of the licence. The sea urchin licences would provide Aboriginal people with an opportunity to get into the commercial sector, and to build up skills and capital.

5.4 LEGAL ISSUES

The IFS Working Group indicated that there is an emerging issue about Native Title and Land Rights claims over marine waters. Neither has really been tested yet in NSW, but if a group were to be successful, the commercial sector would be working in waters that legally belonged to the Aboriginal community, raising the possibility of royalties. The Aboriginal community

could also set harvest limits to allow the stocks to regenerate. Further information about Native Title issues is presented in **Section 5.5**.

In addition the following matters were discussed:

- Some Indigenous youths are involved in illegal abalone fishing. Although there have been many enforcement cases for abalone poaching, most involve small numbers of shellfish. Clearly, however, there have been some significant breaches of legislation.

The Aboriginal community believes that they are being unfairly targeted by enforcement action on the south coast and that insufficient flexibility is being shown by Fisheries Officers when dealing with Aboriginal people. IFS Working Group members reported that community members believe that the abalone industry pays people to “dob in” poachers and there is evidence of Aboriginal people being targeted for enforcement action under this process. Community members believe that the current situation, where the law appears to be enforced strictly to the letter re bag limits, means that many Aboriginal men on the south coast are being fined for having too many abalone or lobster, even if the breach is really technical rather than substantive. People are unable to pay fines and end up in jail. If you have a record, you are excluded from many jobs etc. There is a vicious cycle of “illegal” fishing, fines, debt, jail sentences and social problems.

- At present there are no Aboriginal people holding licences for abalone and none/very few Aboriginal people even employed in the industry. The IFS Working Group recognizes that two abalone licences were originally issued to members of the Indigenous community on the south coast and were subsequently sold. However, it is now nearly 25 years since restrictions to the Abalone Fishery were introduced and a review of the access of Indigenous people to the commercial as well as the cultural aspects of the fishery is considered to be warranted. An Aboriginal employment strategy should be developed for the industry.
- The south coast community has been involved in a landmark court case about ‘illegal’ catches of abalone and lobster during 2004. The defence that was being prepared was that Aboriginal men who take more than the bag limit of abalone and lobster (or other species – see pipi and blood worm issue on the north coast) are doing so in the practice of their community obligations and spiritual beliefs. Similarly, men who shuck abalone on the rocks/beach and throw back the shells are doing so as a traditional cultural practice. If this is the case, then an argument can be put that fining or jailing people for exceeding the bag limit is in fact prohibiting them from practicing their religion. It is illegal to prohibit people from practicing their religion in Australia. Copies of media coverage from Illawarra Mercury and Sydney Morning Herald are included in **Appendix 3**. It is understood that this court case is no longer being pursued.

5.5 ACHIEVING PARTICIPATION IN MANAGEMENT DECISIONS

The following suggestions were made by the members of the IFS Working Group:

- A high level of tension is reported within the Indigenous community on the NSW South coast, which makes successful participation in the existing Abalone Management Advisory Committee difficult. There is currently no Aboriginal representative on the ABMAC. Aboriginal people are willing to sit on ABMAC. It was agreed some time ago that Ron Nye and Graham Moore would represent Indigenous issues on ABMAC, but the IFS Working Group reported that there had been no action from DPI to make this happen. The IFS Working Group strongly supports cultural awareness training for ABMAC.

- In addition to having two (at least) nominated representatives on the ABMAC (and other MACs), DPI should provide support so that the representatives can visit their communities and explain what is going on, plus bring feedback from the communities to the MAC. Aboriginal people cannot represent the interest of communities if they don't have resources to involve them.
- The preparation of the draft FMS and EIS should be a two stage process with the IFS Working Groups, plus there should be a community based expert panel appointed for each FMS (see **Section 5.5**).
- The IFSWG should be recognized as a MAC in the same way as advisory groups for all other FMS (see Section 287 of *Fisheries Management Act 1994*) and given equivalent status. Section 287 states:

Native title rights and interests:

This Act does not affect the operation of the Native Title Act 1993 of the Commonwealth or the Native Title (New South Wales) Act 1994 in respect of the recognition of native title rights and interests within the meaning of the Commonwealth Act or in any other respect.

- DPI should recognise a cultural catch over and above the recreational bag limit for abalone, lobster and other species. In addition, DPI should show more leeway and flexibility when dealing small Indigenous community exceedances of bag limits (or technical breaches that have no real impact on the sustainability of stock).
- The spiritual association of Aboriginal people with abalone and other species must be recognised, as it underpins most activities and explains Indigenous community reluctance to fit within specified small recreational bag limits or fill in special applications for their activities.
- An Aboriginal employment strategy should be developed for the industry, to get people back into the water – as employees and as licence /endorsement holders. Will this involve 'giving' selected licences to the Aboriginal community? Approximately 80% of young Indigenous people on the NSW coast are unemployed. Aboriginal people would value a structured training program that would give them the skills to participate effectively in commercial ventures. They would also value opportunities for partnerships (with DPI) that would further enhance business and technical skills.
- There is an Indigenous aquaculture working group on the NSW south coast, which is considering potential aquaculture ventures, including abalone. However, there are significant technical, property rights, grow out, marketing and funding issues that need to be resolved. Despite these issues, there is some potential for the development of an abalone stock enhancement program, based on aquaculture that could be managed by the Indigenous community.

5.6 OTHER COMMUNITY INFORMATION ABOUT CULTURAL FISHING PRACTICES

As part of the liaison with Aboriginal fishers and community groups about the management of commercial fisheries, and on the advice of the Chair of the NSW Indigenous Fisheries Advisory Group, discussions were held with John Jarrett, who is an Indigenous commercial fisher from the NSW north coast. During the conversation, John (who has been at sea since the age of 12 years), talked about local cultural fishing with his family. As a child, he gathered shellfish with

his mother and grandmother, and they also got prawns at Arrawarra. His mother also gathered lobsters at Woody Head, as well as sea urchin eggs and pipi. Every species was targeted at different times and people knew what would be available at different locations throughout the year. This is the same ‘circle fishing’ concept that was described by south coast communities (Egloff 1981 and Cozens 2003). In addition to the collecting activities of women, John described catching fish in the surf (mullet?). The process involved lots of people, who also shared the catch. People would walk into the surf to surround a large shoal of fish and then gradually walk them into shore.

In addition to the comments from the IFS Working Group, one response was received to the written invitation to Local Aboriginal Land Councils to contribute suggestions about Indigenous community participation in sustainable management of the Abalone Fishery. This response was sent by the Merrimans Local Aboriginal Land Council at Wallaga Lake (Chairperson Michael Darcy). The Merrimans LALC response had two main issues:

- *“We are seeking to close off all waters from Mystery Bay to Bithrey Inlet on the coast within the Merrimans LALC boundary from all persons taking or poaching abalone or protected fishes, groper and shark. This will take management control of all fishing and taking abalone for and on behalf of the Abalone Management Plan.”*
- *“Please add to the seven goals for sustainable management strategy: that all waters within Merrimans Local Aboriginal Land Council boundary be closed to any person except those living within its boundaries and the commercial diver.”*

5.7 INDIGENOUS VIEWS ABOUT SUSTAINABLE NATURAL RESOURCE MANAGEMENT

During interviews about fishery management on the NSW south coast (see Cozens 2003), Aboriginal people referred to ‘sea country’ – generally encompassing estuary and near shore waters, but rarely offshore waters, to which people were attached and for which they had some responsibility to ‘look after’. The Indigenous fishers who were involved in these interviews were licensed Estuary General fishers, and Indigenous representatives on various Fishery Advisory Committees, plus some ‘advocates’ for Indigenous rights.

Cozens’ interviews clearly reveal the nature of Aboriginal fishing (whether or not conducted with a commercial licence) and the intent and framework of that fishing. For instance (p56), she quotes:

‘Aboriginal fishing is a sustainable fishing practice. We practiced circular fishing. We fished for what was around. We fished for mullet in April and May, prawns in spring and summer and salmon from March to November (as) it’s a winter fish. We fished for abalone and lobster in the summer when the water was warmer. We didn’t fish them one step to extinction – we didn’t have to. We didn’t just fish for one species.’

The views expressed by this interviewee are similar to those noted by Faulkner (2000) that Aboriginal people had specialised ecological knowledge of their local landscape, and that they used this local understanding to guide their fishing practices throughout the year. Traditional ecological knowledge includes knowing when and where a particular species will be present, the most favourable time in its lifecycle for consumption, breeding cycles, relationships between lunar cycles, species mobility in its habitat and favoured fishing and collecting opportunities, medicinal values (Faulkner 2000:6). Faulkner suggests that this traditional ecological knowledge is the feature that makes Indigenous fishing ecologically sustainable and

distinguishes Indigenous fishing from other fishing. The teaching and transfer of traditional knowledge is an important aspect of Indigenous fishing.

Whilst the views expressed about the restrained, conservation oriented management of fishery resources by traditional Indigenous fishers need to be seen in the context of the relatively small population that was being fed, and the less invasive technologies that were used, there is no doubt that the intent of fishing strategies was not only to feed the community this year, but to ensure they could be fed and meet their obligations next year too.

A broader perspective of the Indigenous concept of sustainable natural resource management is discussed in the 'Boomanulla Statement', which presents the outcomes of the Boomanulla Conference for Country (March 2002). The Conference involved natural resource representatives from Aboriginal communities across NSW. In terms of natural resources, the focus of this conference was the management of terrestrial catchments (land, rivers and vegetation). However, the principles and recommendations endorsed by the Conference are very similar to less formal statements that have been made in relation to Indigenous involvement in the management of coastal fishery resources over the last few years. Some important principles, noted in the Boomanulla Statement and stressed frequently by representatives of Indigenous communities, include:

- *The health and livelihood of Aboriginal communities is related to the health of the river systems and the land (and in the current case, the coast, estuaries and beaches).*
- *Cultural and biological diversity are two sides of the same issue for people who relate to the land and the rivers spiritually.*
- *Consultation with Aboriginal communities means negotiation with them about the meaning of land (and sea) management and about what must be done. Aboriginal representatives must be linked to the community and Elders Councils.*
- *The economic future of Aboriginal communities will be tied to natural resources. There must be benefit sharing as a principle for any planning approach. Aboriginal communities will expect employment, education, and training outcomes from natural resource management plans. Aboriginal people have a traditional custodian's right in relation to natural resources which they have never given up.*

6.0 CONTEXT - CONTEMPORARY INDIGENOUS FISHING PRACTICES AND PREFERENCES IN NSW

Section 6 reviews currently available studies on the character and role of fishing in contemporary Indigenous communities in NSW. These studies, which are primarily based on various forms of survey of fish catches and community views on fishing activity, provide evidence to support Indigenous community statements made during the current project about the significance of fishing generally to coastal Indigenous communities. Documentation of the contemporary fishing practices, catches etc (whether commercial or cultural) of Indigenous people in NSW is patchy, and many questions remain unanswered. In particular, detailed studies of community attitudes and behaviours in relation to individual species are not available.

6.1 ABORIGINAL COMMUNITY FISHING/SHELLFISHING ON THE NSW SOUTH COAST

Considerable detail about late nineteenth to mid twentieth century Aboriginal community fishing practices is provided in Egloff (1981) who researched the history of the Aboriginal community at Wreck Bay on the NSW South Coast. The focus of Aboriginal fishers at this location was generally in inshore waters.

Egloff (1981) reports that the Office of the Protector of Aborigines provided a boat and fishing gear to Aborigines at Broughton Creek in 1882 and that a boat was also provided to the Jervis Bay people (at Currumbene Creek) the following year.

Egloff (1981) also reports that the Office of the Protector of Aborigines also provided fishing boats to reserves and camps along the south coast:

“In the Bodalla district, Aborigines were considered by ME Mort to be destitute without a boat. These Aborigines had sold fish for a living until their boat was wrecked while going to the assistance of a sinking vessel... While most white Australians do not realise the extent to which coastal Aborigines quickly adopted European maritime technology and became net fishermen capable of making their own gear and surprisingly enough also pursued large whales. Recently buried at Wreck Bay is one of the great whalers of Twofold Bay, Aden Thomas. Before him were Hadgadi and Adgerree, two coastal Aborigines famous for their whaling exploits.”

(Egloff 1981: 23).

Egloff (1981) also provides information about the small scale Indigenous fishing for abalone at Wreck Bay. Abalone provided much needed income to the Wreck Bay community (on the south coast of NSW) during the depression years:

“During the depression the people of Wreck Bay were thrown back on their own resources. Three families camped on the southern beaches to be closer to natural food sources....People turned to a number of different pursuits to gain cash, one of those ventures being the gathering of abalone. After sun-drying on wire racks it brought six pence a pound from a ‘Chinaman who came down from Sydney’.”

(Egloff 1981:33).

The Jervis Bay/Wreck Bay example illustrates the adaptation of traditional fishing to the small scale commercial sector, although clearly local subsistence and cultural fishing continued to be

practiced. The Wreck Bay case study reinforces comments from the NSW Aboriginal Land Council (pers. comm. 2002) who note that many of the missions (and other government sponsored settlements) established in the late nineteenth and early twentieth centuries were on estuaries or coastal headlands. Aboriginal people who were placed in these institutions would have been expected to provide a substantial proportion of their food supply by fishing and shellfish gathering, utilising existing skills and traditional practices, augmented by other equipment where it was available.

Cruse, Stewart and Norman (2005) documents a series of conversations with members of the Aboriginal community on the far south coast of NSW whose families have been involved in abalone gathering, both for cultural and commercial reasons for generations. These oral histories highlight several important features of Aboriginal community economic life on the south coast during the nineteenth and early to mid twentieth centuries, including:

- the ongoing importance of fishing and shellfishing (with a focus on mutton fish/abalone) and the continuation of a traditional coastal lifestyle centred around popular beach camps that were seasonally occupied;
- the abundance and accessibility of abalone in the early and mid twentieth century, with abalone readily available around the rock platforms. It wasn't necessary to dive to get a feed for the extended family;
- the overwhelming importance of fish and shellfish in the diet of south coast Aboriginal people who were part of the ongoing beach camp culture (before people moved into houses in the towns in the 1960s). Old people now describe how they lived on mullet, salmon, abalone, prawns, oysters and lobster, supplemented occasionally by terrestrial fauna (including rabbits). There was always a fire and a big pot on the beach, to cook the latest catch. Most camps had no refrigeration, so people only took what they could cook and eat in one day;
- Aboriginal people also provided the labour source for hand picking of peas and beans and for the south coast timber/sawmilling industry. Picking provided an alternate seasonal income to fishing;
- the importance of Chinese settlers in the early commercialisation of Aboriginal harvesting of abalone. Aboriginal people worked with the Chinese traders. Ossie Cruse (in Cruse, Stewart and Norman 2005, p30) describes the family involvement in abalone diving, processing and trading. The activity was focused in the summer, because that was when the shellfish meat would dry fastest on the hot rocks. Men dived for abalone and women shelled and cooked it in old kerosene tins on the rocks or on the beach. The diving, processing and trading activities are illustrated in a drawing by "Mickey" of Ulladulla, whose art work highlights many aspects of Aboriginal life on the NSW south coast; and
- in the 1950s and 1960s, Aboriginal families were catching enough (principally lobster and mutton fish) both for their own needs and also to barter or sell for other supplies. Aboriginal people were skilled divers (snorkelling and later with an air line). By this time, the market value of abalone was starting to rise, as abalone went from being a species disdained by white communities to something that everyone was after. Overall catches skyrocketed. Cruse, Stewart and Norman (2005) quote catch statistics rising from 18 tonnes in 1964/65 to 1200 tonnes in 1971. Aboriginal people were clearly involved commercially as well as culturally at this time, although they appear to have had only marginal access to the profits taken as prices increased.

6.2 SURVEY OF RECREATIONAL FISHING IN NSW

NSW Fisheries (2002b) conducted a survey of recreational fishing activity, in which data about Indigenous fishing practices was analysed separately from the general population. Fishing households were first contacted by telephone (i.e. a phone survey) and then encouraged to participate in a diary program where monthly information was collected about fish catches, fishing effort and fishing expenditure. Basic information about each household included household structure and demographic character (including ethnicity).

Of 10,300 households who were sampled by the phone survey in NSW (containing 19,600 people over five years of age), 1.4% were Indigenous people. Of 1836 households who participated in the diary program, 1.3% of households (1400 households), with 1.7% of people (approximately 3300 adults and children), were Indigenous. This is a relatively small sample, given the Indigenous population in NSW and the importance of fishing to Indigenous communities. However, the sample does provide a preliminary indication of some of the characteristics of Aboriginal fishing that distinguish it from other groups. The results of the survey are only indirectly relevant to the issues surrounding abalone fishing, as no shell fish are listed amongst the species caught.

Although this was a recreational fishing survey, it should be noted that most Aboriginal fishers who participated would not have considered that they were fishing for recreational purposes. Rather, Indigenous people consistently report that they are fishing for cultural purposes or subsistence purposes, such as for the reasons noted below and in **Section 5**.

e.g. “Grandfather told me that 2-3 hunters used to go out and take some young to teach and they would catch enough for the full tribe. In amongst that group there would be up to 30 people”

(Uncle Doug Pearce, Indigenous Fisheries Forum Group, Yamba)

“Indigenous fishing is cultural. It’s about being a part of the land and water to get back to your roots. We don’t look at size of bag limits, we look at what needs to be taken home. If an 8 year old goes and gets a feed and doesn’t bring enough back for everyone at home, they are going to get their arse kicked.”

(Aboriginal interviewee (south coast), quoted in Cozens 2003)

The fishing effort by Aboriginal fishers over the period of the survey is greater than the average across the state, hinting at the broader Aboriginal community consumption of the catches of Aboriginal fishers. Also of interest is the high proportion of fish that are reported to have been released (close to 50%, and in some cases the majority of the reported catch). The reason for this is not clear from the preliminary statistics, and the high release rate is not consistent with the results of the more detailed surveys of Indigenous fishers in northern Australia (see below), where negligible amounts of the catch were not retained by Indigenous fishers. It is of note that some Indigenous people in NSW report that they have a clear cultural practice of returning small fish.

“We know when a fish is too small to eat, chuck him back grow up bigger”

(Uncle Doug Pearce, Indigenous Fisheries Forum Group, Yamba)

This view is not however, expressed consistently across the community, as evidenced by the following comment:

“Aboriginal people do not go recreational fishing. When the Wallaga Lads go fishing they go fishing to get a feed. Aboriginal people do not catch fish and kiss them and throw them back, they catch them to eat them.”

(Aboriginal interviewee (south coast), quoted in Cozens 2003)

6.2.1 A Description of Aboriginal Fisheries in NSW

Schnierer and Faulkner (2002) document the results of consultation with Aboriginal people in coastal communities in NSW, about the ways in which they utilise aquatic resources for food, medicines and other parts of their daily lives. The research draws on the results of 150 questionnaires and multiple interviews with individuals, families and communities. Some of the consultation was conducted during the development of the NSW IFS.

The results of the consultation enhance the information available from the Recreational Fishing Survey and provide strong community views not only about which species are targeted, when and how, but also the reasons for fishing. It is these reasons, and particularly the cultural identity of Aboriginal fishing, which separate the fishing activities reported by Indigenous people from other fishing in the general community.

Schnierer and Faulkner (2002) also report on comments by Indigenous people about their current participation in the commercial fishery sector, their concerns about the trends that are evident in participation rates, constraints to improved participation and ideas for how the specific cultural character of Indigenous fishing could be incorporated into commercial fishery management. These issues and suggested solutions generally relate to the broad concepts of commercial and Indigenous fishing, and do not specifically concern the Abalone Fishery.

Schnierer and Faulkner provide a comprehensive list of invertebrate species (see **Table 6.1**) that are targeted by contemporary Indigenous fishers, demonstrating the diversity of species of interest.

**Table 6.1 - Aquatic Invertebrates Targeted by Indigenous Communities in Coastal NSW
(Schnierer and Faulkner 2002)**(N = Northern, C = Central, S = Southern, M = Marine, E = Estuarine,
F = Freshwater, C = Commercial, R = Recreational)

Common name	Scientific name	Region	Habitat	Fishery
Abalone	<i>Haliotis ruber</i>	C,S	M	C, R
Beach worm spp.	<i>various</i>	All	M	C, R
Bearded mussel	<i>Trichomya hirsuta</i>	All	M	
Bimbla cockles spp.	<i>various</i>	C,S	E	
Blue swimmer crab	<i>Portunus pelagicus</i>	All	M,E	C, R
Cobra	<i>Teredo navalis</i>	N	E	
Eastern king prawn	<i>Penaeus plebejus</i>	N,C	E	C
Edible mussel	<i>Mytilus planulatus</i>	All	M,E	
Freshwater mussel	<i>various</i>	All	F	
Greasy back prawn	<i>Metapenaeus bennettiae</i>	All	E	C, R
Lobster spp.	<i>various</i>	All	M	C, R
Mud crab	<i>Scylla serrata</i>	All	E	C, R
Mud oysters	<i>Ostrea angasi</i>	All	E	
Octopus spp.	<i>various</i>	All	M,E	
Pacific oyster	<i>Crassostrea gigas</i>	All	M,E	
Periwinkle spp.	<i>various</i>	All	M, E	
Pipi	<i>Donax deltoides</i>	All	M	C, R
School prawn	<i>Metapenaeus macleayi</i>	All	E	C, R
Sea urchin	<i>various</i>	All	M	
Shrimp	<i>Machrobrachium sp</i>	All	E,F	
Squid spp.	<i>various</i>	All	M,E	C, R
Sydney cockle	<i>Anadara trapezia</i>	All	E	
Sydney rock oyster	<i>Saccostrea commercialis</i>	All	M,E	C, R
Tapestry cockle	<i>Tapes watlingi</i>		E	
Yabby	<i>Cherax destructor</i>		F	

Numerous fish species are also targeted by the Indigenous community (not listed here).

The species listed are primarily estuarine and near shore species, many of which are also targeted by recreational fishers and commercial fishers, as is the case for abalone. Although most species are collected or caught along the entire NSW coast, abalone and Bimbula (blood) cockles are noted to be restricted to the south coast. This contemporary pattern is different to that indicated archaeologically, where abalone occurs in midden sites and is reported to have been caught by communities along the central and north coasts as well as the south coast.

Responses to survey questions about the frequency of fishing events and the destination of the catch both reinforce views expressed in other discussions about the reliance of Indigenous people on fish and shellfish catches as a significant part of their diet, and the importance of sharing catches with the extended family. Eighty-one percent of respondents noted that they fished either to supplement their family's diet or to share with their extended family (especially Elders).

Schnierer and Robinson (1993) in Zann (1996) described the historical and contemporary uses of marine resources, particularly fin-fish and invertebrates in northern NSW. They found that local communities continued to utilise seafood as a food source (for instance, making up 30% of the diet in the lower Clarence valley).

However, whilst these subsistence/dietary reasons for fishing are clearly important and continue traditional practices, other reasons for fishing indicate particular characteristics of Indigenous fishing that distinguish it from fishing by other groups in the community. For instance, many people in the broader coastal community, who are members of lower income families, fish to supplement their family diet, and several ethnic groups are known to target particular species for food or income or to fish seasonally to take advantage of fish breeding or migratory behaviours.

However, none of these other groups have the cultural ties to the land and water that Aboriginal people express. Schnierer and Robinson (1993) in Zann (1996) note the desire of Indigenous peoples to become more involved in commercial fishing industries based on the assertion that they were the original owners of the coast and its resources, which were never ceded to anyone.

The quotes noted below reflect both the subsistence/dietary values of fishing and the cultural values of fishing for Aboriginal people.

“Fishing has always been in our family and will continue because it is a main meal for us.”

“We catch fish for our Elders and for children to help them with their health.”

“Limits set by Fisheries don’t take into account how we fish and collect for our communities as well as for ourselves.”

“Fishing is for relaxation; family outings; getting a feed of fish.”

“It’s our birthright to collect seafood and freshwater fish even though we eat white fella food, we still eat our traditional foods (kangaroo, possum, spiny ant eater, salt water and fresh water foods).”

“I feel it’s important that we keep fishing regardless of whether we do it traditional or not, we need to pass our methods down to our children so as we can keep the culture going.... Not forget who we are.”

“Fishing is a tradition and a culture throughout Aboriginal people today – letting the younger generation know of what Aboriginal bush food is.”

“How can we continue on with our cultural right of families visiting, camping and sharing stories, obtaining fish and pipis when we have no access to the special place. These are concerns. The fishing co-ops continue to mine pipis, all sizes are collected, not just like Goories only take what is needed.”

“Recognition of Goorie culture which includes fishing as a means of keeping families.”

Schnierer and Faulkner (2002) highlight two important issues associated with Indigenous involvement in the commercial fishery sector.

They note the competition for resources and emerging conflicts that have been present since the early days of European settlement along the NSW coast. Historical records of nineteenth century resource exploitation highlight the depletion of stocks and environmental degradation

brought about as European settlement expanded. An example is the harvesting/mining of oyster beds in estuaries such as the Hunter, Port Stephens, Camden Haven and Clarence where extensive natural oyster reefs were removed during the nineteenth century and have never recovered. Apart from the ecological implications of this change to estuary morphology and species abundance, such practices would clearly have had a dramatic impact on the resources available to Indigenous people. Schnierer and Faulkner (2002) argue that despite the evidence of failed management of fishery resources by European fishers, they have maintained control of the resource, largely to the exclusion or ‘marginalization’ of Indigenous people.

The second key issue is the recognition of distinctive Indigenous commercial fishing practices that does not necessarily fit with the general commercial fisheries concept. It is argued that failure to recognise these practices as valid commercial activities has led to a decrease in the participation of Indigenous people in the commercial sector generally and created barriers to continuing commercial participation (including fee structures, return requirements, licence transfers and access to training to update skills).

The final quote from an Indigenous commercial fisher (in Schnierer and Faulkner (2002)) highlights the frustrations felt by Indigenous fishers about the management of the commercial sector generally. It is important to note however, that the issues raised link back to the focus of Indigenous fishing on estuarine and beach/nearshore species and are not made in the context of the Abalone Strategy in particular.

“I want to continue supplying the community and the Elders with pipis and seafood when I can. Pipis and fish have kept the Aboriginal community in this area going for generations since non-Aboriginal people came here and now it’s getting harder for Aboriginal people to get licences to fish these days. Fishing is something that is very important to Aboriginal people and their culture and I would like to stay in business so that the community can at least maintain some involvement in the fishing industry.”

6.2.2 Summary – The Economic and Social Value of Fishing

The research undertaken by Schnierer and Faulkner (2002) provides an insight into the economic and social value of fishing and shellfishing to the Indigenous community:

- Fishing provides food for the fisher’s household and the extended family. Seafood has been and continues to be a major part of coastal communities’ diets and so is beneficial to people’s health. The practice of fishing also contributes to people’s physical and spiritual health.
- Fishing and collecting is a cultural practice which is an important part of an Indigenous identity. It involves the passing on of traditional fishing knowledge to younger generations.
- The supply of fish and shellfish by local communities during cultural events is a practice which maintains community identity and goodwill.
- Historically Indigenous people have participated in commercial fishing as boat owners, labourers, and collectors and suppliers of bait. This was a seasonal source of income for many people. For example, Indigenous people provided bait (beach worms) to holiday makers in many coastal villages.

6.2.3 National Recreational and Indigenous Fisheries Survey

Henry and Lyle (2003) report the full results of the National Recreational and Indigenous Fishing Survey. This research report provides a separate analysis of the fishing practices of Indigenous people in northern Australia. Whilst it cannot be assumed that northern Australian communities (across Western Australia, Northern Territory and Queensland) would have the same fishing practices or specific cultural values as those in southern Australia, the survey results do indicate some very clear distinctions in the focus of fishing effort, particularly between offshore and inshore waters in northern Australia. More than half of the fishing effort reported by Indigenous fishers who participated in the survey was focused on inshore water (shoreline and less than 5 kilometres from the coast), where fishing can be conducted with small boats and relatively simple equipment. Overall, some 93% of Indigenous fishing in the study area was conducted from the shore, although 21% of fishing households in Queensland reported fishing from boats. Indigenous people also reported a higher frequency of hand gathering of fish and shellfish than did other fishers who participated in the survey.

It is understood and acknowledged that some Indigenous communities have expressed dissatisfaction with the research methods used in this survey (Schnierer pers. comm.). The study does provide useful baseline statistical data, and highlights areas for further consultation with communities to ensure culturally acceptable processes and outcomes.

As noted above, these results are not necessarily transferable to southern Australia and there are risks in assuming that cultural practices are the same or that Aboriginal people's fishing activities in southern Australia cannot be adequately explained in cultural terms. However, if the results are considered to be *broadly* indicative of Indigenous community fishing behaviour, then a number of features emerge that are relevant to the current assessment of the impact of the Abalone Fishery in NSW. These include:

- Aboriginal fishers who are not commercial licence holders tend to access marine fish and shellfish species almost entirely in inshore areas, and most often from the beach rather than from boats.
- Indigenous fishers target a wider variety of fish and shellfish types and other marine species (particularly shellfish) than other 'recreational' fishers (this reinforces the information provided by Schnierer and Faulkner 2002).

7.0 INDIGENOUS PARTICIPATION IN THE COMMERCIAL SECTOR

This section reviews the extent to which the current regulation of the Abalone Fishery influences Indigenous community participation, both as holders of commercial licences and in contributing to decisions about the management of the fishery.

Vivienne Mason, administrator for the Bega Local Aboriginal Land Council described the lack of Indigenous participation in the Abalone Fishery at the Land Council's opening in 1993:

“That’s what the Koories have survived on for thousands of years, and now....Koories who have applied for a fishing licences.....[have been] refused, and abalone license costs close to half a million dollars. Ronny [her husband] often speaks of when they were growing up on the coasts and the gubbas [white people] didn’t know what abalone were, they had no idea. They would watch the Koories diving for abalone and when asked what they were , the Koories naturally told them....Over the years the Japanese got hold of it and now it’s a million dollar export market. Yet the Koories are being hounded and chased by fishing boats and threatened by fishing community because they’re gathering their own food.”

(McKenna 2002:222)

Aboriginal participation in the Abalone Fishery is very limited and low participation has been exacerbated by a range of historical circumstances. The removal of many Indigenous people from their traditional territories and lifestyles reduced their capacity to adopt new fishing technologies and methods gradually as they were introduced through the twentieth century. In addition, the low economic status of many Aboriginal families also tended to reduce the financial capacity of Indigenous fishers to subsequently catch up with new technologies (Schnierer pers. comm. 2004). More importantly, the lack of provisions in the NSW legislation to protect Indigenous fishing rights has discounted the ability of Indigenous people to enter newly developing fisheries or to stay in ones where management strategies squeezed out so called ‘inefficient fishers’ (Schnierer pers. comm. 2004).

John Jarrett, an Indigenous person who owns and operates an ocean prawn trawler on the NSW north coast, noted several important constraints to young Indigenous people getting involved in the offshore commercial sector (these constraints also apply to the Abalone Fishery, and the majority of other fisheries). The constraints include:

- Licences are expensive and are linked to the boat. So to enter the industry you need the capital to buy the boat and the business.
- People entering the commercial industry need multiple skills. They must not just be skilled fishermen, but be up to date on all the regulations etc, know about mechanics and maintenance, be able to cook etc. Many young Aboriginal people do not have the right mix of skills. As noted in the IFS (see **Sections 5 and 8.3**) improved skills for Indigenous people to facilitate their entry into the commercial sector is a priority for the IFS Working Group. John Jarrett suggested that the capital needed to buy multiple licences as a commercial venture for the Indigenous community could be as much as \$10 million. He suggested that one possibility that could be considered would be a scheme like the CDEP, seeking to provide the right mix of skills and capital to assist Aboriginal employment and business development.

Indigenous fishers comment that over the last twenty years or so, the restructuring of the commercial fisheries to enhance efficiency and provide controls to protect biodiversity has tended to reduce the involvement of Indigenous fishers in the commercial sector.

At a workshop held in June 2003 to address low participation of Indigenous fishers in commercial fisheries generally, participants identified significant constraints to the commercial viability of Indigenous fishing. In particular, the workshop group, which included licensed Indigenous commercial fishers, and members of the IFS Working Group, noted five key constraints (Callaghan and Associates 2003, for the IFAG, page 4):

- closures of ocean, beach and estuary fisheries have excluded Aboriginal fishers from traditional fishing areas (commercial and non commercial);
- difficulty in the passing on of licences within families;
- costs of licences, particularly restricted licences, can exclude Aboriginal fishers by making their activity uneconomic;
- the gradual and continuing decline of Aboriginal commercial fishers in the industry means loss of an accessible and appealing employment base for Aboriginal communities. Aboriginal commercial fishers who fish within cultural frameworks as well as for employment and income, may be more successful with additional flexibility in licensing arrangements, such as nominating crew members, subleasing of licences, and assistance with licence fees. In addition, gaps in fishing work due to licence losses etc make it more difficult to maintain or enhance skills – and therefore more difficult to return to commercial fishing; and
- exclusion zones, restructuring more fishers into smaller areas, make commercial survival for Indigenous fishers very difficult.

7.1 THE IMPACT OF REGULATION

The commercial abalone industry commenced as a species targeted entity in the 1960s. The operation of the commercial fishery formalises the sharing of the abalone resource between the commercial, recreational and Indigenous/cultural sectors and has resulted in regulations which aim to manage the overall abalone population sustainably. The recreational fishing sector has also grown during this time and so the pressure on the abalone population has been great. Increased regulation of this sector has also been required.

Indigenous fishers are currently included within the recreational sector, except when operating under a specific permit to allow fishing for particular cultural events.. This classification denies the distinct role fishing has in Indigenous communities and Aboriginal people believe that it restricts the fishing and collecting activities traditionally undertaken by Indigenous people. It also restricts the opportunities for traditional fishing knowledge to be passed on. Aboriginal people believe that they do not share in the benefits of commercial abalone fishing and that their cultural practices are inhibited by the regulation of the industry.

A total ban has been placed on the taking of abalone from the waters between Port Stephens and Wreck Bay until November 2007. The *Perkinsus* parasite has reduced abalone stocks to just 5% of their former populations in some areas. This ban also applies to Indigenous people and so the traditional variety of resources taken by these communities has been restricted. The taking of abalone is also prohibited in Marine Parks and some Aquatic Reserves.

The ways in which traditional fishing practices are carried out have also been affected by regulation. The cleaning of abalone (referred to as shucking) is prohibited near or on the shoreline. This was and continues to be a traditional practice in food preparation, involving

returning the waste back into the food chain immediately (Schnierer and Faulkner 2002 and Cruse, Stewart and Norman 2005).

7.2 ILLEGAL CATCHES OF ABALONE

Palmer (2004) undertook a review of illegal harvesting of abalone in NSW, on behalf of the then Minister for Fisheries. The review was conducted with an Advisory Team comprising commercial, marketing, recreational and regulatory representatives. Palmer conducted interviews with Aboriginal fishers, but the Aboriginal community was not represented on the advisory Team.

Palmer's report notes several important issues associated with Indigenous and commercial fisher relationships. These are noted below, together with Palmer's recommendations about how some of the issues could be addressed. It is important to note that Palmer's views are not necessarily those of DPI or the abalone industry.

Palmer (2004) reports that *"theft of abalone stock in NSW is most consistently estimated by industry as being between 20% and 60% of Total Allowable Commercial Catch of 281 tonnes per annum."*

Palmer also notes the results of a previous report commissioned by industry (Prince 1989) which commented on the additional impact of poaching on abalone stocks associated with taking undersize specimens. This undermines breeding stocks. The legitimate recreational catch was not considered to pose any threat to the sustainability of the industry.

Palmer notes that although the NSW abalone industry comprises only a relatively small portion of the Australian abalone market, the product is of high quality and is in high demand. In addition, abalone reefs along the NSW coast are generally accessible and are therefore vulnerable to poaching by snorkel divers and/or people using commercial diving equipment.

Palmer has recommended that the recreational bag limit for abalone should be reduced from 10 to five abalone, to help conserve stocks. He also notes, however, that this would not be favourable to Indigenous fishers, and that the concept of increasing abalone bag limits for specific cultural events should be considered. The report presents a strong case for a review of how regulation of the abalone industry affects Indigenous people. Key points are noted below:

- The present situation on the south coast is socially damaging to Aboriginal people. In accordance with the IFS, the protection of traditional Aboriginal fishing rights should underpin all aspects of DPI policy, and not be treated as a separate issue.
- Aboriginal people have a historical and traditional association with abalone, reflected in midden sites dating to thousands of years – i.e. there can be no doubt that abalone is a traditional cultural resource.
- Support for the role and work of the IFS Working Group is critical to the resolution of issues associated with abalone, as well as a range of other cultural fishing issues. Palmer suggests that the term of the IFS working group should be extended, and that its status should be brought into line with other Management Advisory Committees.
- The existing opportunities for Indigenous people to participate in Management Advisory Committees need to be better communicated to the Aboriginal community, and DPI should act promptly to support Aboriginal people where they have been nominated to represent Indigenous interests on MACs.

- Indigenous people do not believe that the current laws respect their heritage and traditional practice rights.
- Indigenous people consider that current bag limits and other management restrictions do not allow for cultural practice. Greater flexibility, for instance, is recommended in relation to beach shucking, to allow fisheries officers to measure catch, without compromising cultural values/practices.
- The current penalty system imposes a large social burden on the Aboriginal community, and alternative punishment systems need to be considered, to improve justice. In particular, Palmer suggests culturally managed penalties and linking penalties to work experience or training, to reduce the likelihood of further offences.
- Culturally based defences to some current offence descriptions should be considered. Palmer also notes the apparent discrepancies in the way the fishing licence exemptions are administered in coastal and inland communities. He suggests that if all Indigenous fishers were required to hold a licence, that the funds so generated could be specifically channelled through a trust to resolve Indigenous fishery issues.
- The significant gaps between the Indigenous community, the commercial operators and DPI regulators require significant reform. In particular, it is critical that genuine opportunities are created for Indigenous people to have a greater role in both fishery management and the recovery of the resource (abalone stocks).
- The concept of a community abalone scheme could be investigated as an alternative to the current permit system. The potential to establish an abalone hatchery, with Aboriginal people as the main stakeholders could also be further promoted as a means to aid stock recovery and assist long term sustainability of abalone stocks.

7.3 INDIGENOUS RIGHTS TO COASTAL WATERS AND MARINE RESOURCES – IMPLICATIONS FOR PARTICIPATION IN COMMERCIAL FISHING

Two of the key issues of concern to Indigenous people about the management of commercial fisheries in marine waters is the extent to which commercial fishing activities impact on the conservation of traditional resources and ‘country’ and also the extent to which Aboriginal people have been able to actively participate in the wealth generating activities of commercial fisheries that operate in waters that they consider to be ‘country’.

The Lingiari report on Indigenous Rights to Offshore Waters (2002), and Tsamenyi and Mfodwo (2000), both argue that much of the focus about Indigenous rights to waters so far has focused on customary or cultural rights (i.e. the right to practice cultural fishing), with little real attention to commercial fishing rights for Indigenous peoples. Tsamenyi and Mfodwo (2000) argue that commercial fishing rights for Indigenous people are an important part of the right to self determination. In Australia, there is no legal recognition (and little policy recognition) of the right of Indigenous people to participate in commercial fishing as a specific group, differentiated from other commercial fishers, although there is clear recognition of the customary rights of Aboriginal people to marine resources. There is also recognition that commercial fishing activities should minimise their impact on customary fishing practices.

Lingiari (2002) and Tsamenyi and Mfodwo (2000) suggest that outcomes of the lack of positive legislation in regard to Indigenous rights to participation in commercial fisheries include:

- Aboriginal people having little direct say in the management of fishery resources (e.g. in setting policy about target species and harvest rates, about appropriate fishing technology and about the management of waste); and
- restricted Aboriginal participation and benefit from the economic values of the commercial sector, either as owners of the resource, or as owners of licences (rather than as employees).

Clearly these are major issues for state and National policy on the management of Australia's coast and seas and their resolution extends well beyond the scope of any individual fishery management strategy in NSW. However, the apparent low participation of Indigenous people in commercial ocean fisheries is consistent with the noted National situation, and the issues that have been raised in NSW about access to the commercial sector generally are consistent with those put forward on the national agenda.

In terms of the assessment of the draft abalone FMS, a key question is whether it adequately recognises these Indigenous rights to customary fishing and self determination. To a large extent this will depend on broader DPI policy development, in consultation with the Indigenous Fisheries Advisory Committee. As a minimum, the draft abalone FMS can note the ongoing need to enhance Indigenous participation and foreshadow progressive reviews of actions within the strategy as new positive initiatives are introduced at the broader policy level.

8.0 DRAFT ABALONE FISHERY MANAGEMENT STRATEGY – ACTIONS TO MANAGE INDIGENOUS ISSUES

This section reviews the existing policy framework for Indigenous fisheries and considers the extent to which the draft abalone FMS is consistent with this framework and supports the management concepts and direction that have been agreed.

8.1 CURRENT ISSUES

The information provided in **Sections 5, 6 and 7** demonstrates that there are significant conflicts between Aboriginal communities' expectations of the management of the Abalone Fishery and the expectations of DPI officers and commercial abalone divers. Key issues include different views about matters such as those noted below. These issues relate both to the long term sustainability of the abalone resource and to the ways in which Indigenous access to the resource are regulated/managed.

- The causes of declining abalone stocks and how recent declines should be controlled and reversed. There are different views, for instance about the impact of “illegal” catches by the Aboriginal community when compared with other illegal catches, the impact of the *Perkinsus* virus, and whether stock recovery can best be aided by closures, or aquaculture derived stocking programs.
- The appropriate sharing of limited abalone stocks between the commercial, recreational and Indigenous sectors (including the extent to which Indigenous abalone divers should be regarded as separate from recreational divers).
- The low level of participation of Aboriginal people in the commercial abalone industry, even though many Aboriginal people in coastal areas come from families with a strong fishing orientation or culture.
- The contribution of the current regulatory regime to impacts on Indigenous community social and economic conditions, with excessive numbers of men fined or in jail.
- Poor communication between Aboriginal and industry groups about how to move forward, to resolve past difficulties and to provide sustainable and equitable opportunities for all stakeholders.

8.2 INDIGENOUS COMMUNITY OBJECTIVES, VALUES AND ISSUES FOR THE RESOURCES OF THE ABALONE FISHERY

From the information presented in **Sections 4 to 7**, the following key values and objectives from an Indigenous community perspective can be deduced. As noted in **Section 4**, these conclusions are based on a small sample of opinion from the Indigenous community in coastal NSW and should not be taken as representing the views of all members of the Indigenous community who participate in fishing. It is anticipated that there will be local and regional differences in emphasis and in detail.

The key values that have been taken forward into the assessment of the relationship between the Indigenous community and the operation of the commercial abalone sector are:

1. Communities value access to marine resources close to the beaches and headlands of the NSW coast. The species that occur on rocky headlands, nearshore reefs and islands, along

beaches and in the shallow marine waters close to shore are an important part of contemporary Indigenous community diet. Different species are targeted at different times of the year with the aim of providing food for the whole community (or at least an extended family group). Fishing in these areas continues a long tradition of Indigenous dependence on and conservation of marine resources. Abalone is one of the species for which there is evidence of continuity of cultural interests.

2. Indigenous people target the same abalone population as the commercial sector. Abalone is just one of a wide variety of species in the inter-tidal zone targeted by Aboriginal people.
3. Communities value access to fish and shellfish species or to places where these species occur for the purpose of teaching younger members of the community about traditional values, particularly respect. In general, these places and species are those that occur on or near to the shore.
4. Indigenous people in coastal areas have ‘totems’ that include marine species. Whilst these vary from one area of traditional country to another, they are known to include some marine birds, whales, dolphins, turtles and some fish species. No information is available at this time about the totemic status of abalone. The relationship to these totem species may include beliefs about protection, mutual support, environmental or other information.
5. Aboriginal people aspire to active participation in the protection of places and habitats that are or have been used by the community as part of the socio-economic activity of food gathering or for the transfer of cultural traditions.
6. Active participation (i.e. real influence or control) in the management of any aspect of the fishery that impinges on Indigenous community socio-cultural values (this is distinguished from consultation) is an important objective for Indigenous people.
7. Employment or other economic advantage from participation in the activity that will help to support the social and cultural values of the community. Employment and economic gain from marine commercial fisheries is seen as an important pathway to economic self determination.
8. Respect and equity in the management process is a fundamental value of the Indigenous community.

With these values in mind, the following objectives are considered to frame the approach and management outcomes for the Abalone Fishery from an Indigenous community perspective.

It is important to note that the Indigenous community’s objectives for the sustainable management of the abalone resource in NSW are separate from, but related to their objectives for the management of the commercial sector. In particular, the issue of equitable sharing of access to the abalone resource (stocks) and overall maintenance or restocking of the resource provide context for the operation of the commercial sector, but is separate from how Indigenous people participate in or are affected by the management of a predetermined commercial resource allocation.

The commercial sector management objectives, from an Indigenous perspective are therefore considered to be:

1. To continue to document the species and places of traditional cultural or spiritual value to the Indigenous community along the coast, so that any potential impacts from commercial operations can be better defined and reversed wherever possible.

2. To ensure that there is clear and open communication between fishery managers and the Indigenous community about commercial catches, methods, regulation, overall trends in stocks, impacts, benefits.
3. To support culturally appropriate opportunities to be involved in the management of the commercial sector.
4. To enhance the skills and capacity of the Indigenous community to participate in the fishery sector, both as fishers (owners, operators and crew) and in terms of active involvement in the Abalone Management Advisory Committee.
5. To investigate opportunities for active participation in the Abalone Fishery.
6. To ensure that the Abalone Fishery is managed in a manner that is consistent with sustainable resource use – i.e. that does not result in irreversible damage to habitats, or irreversible decline in the abalone population. This means that the resource can continue to be shared between commercial, recreational and Indigenous users in the long term.
7. To reduce the current level of tension between Indigenous fishers and the commercial abalone sector. Whilst an improved co-operative relationship between the Aboriginal community and the commercial abalone industry can be expected to be an outcome from the above objectives, changes to the status of Indigenous fishers in terms of licensing arrangements, bag limits etc would also greatly reduce current problems. These changes are outside the scope of the abalone FMS.

8.3 INDIGENOUS FISHERIES STRATEGY AND IMPLEMENTATION – INTERACTION AND IMPLICATIONS WITH THE ABALONE FISHERY

The IFS was released in 2002 after consultation with Aboriginal communities at several regional meetings. The Implementation Plan that accompanies the Strategy identifies actions for 2003 and 2004, and the progress towards priority actions is monitored by the IFS Working Group. Although there continues to be some regional criticism of the structure and operations of the IFS Working Group (see for instance Cozens 2003), it is a major step forward in terms of Indigenous community involvement in fishery management in NSW. The contribution of the IFS Working Group extends well beyond the IFS itself and includes advice on the development, consultation process and implementation of fishery management strategies in all sectors. It can be anticipated that as the IFS Working Group develops, it will be able to provide strong support to Indigenous community representatives on other Fishery Management Committees and also enhance feedback of information about fishery management to and from regional Indigenous communities.

As noted in **Section 8.3**, the current finding for the IFS Working Group will cease in late 2004. Whilst the Group has made significant progress on a broad front of issues, much remains to be done before the IFS objectives could be seen to have been achieved. The IFS Working Group plays a pivotal role in supporting Indigenous community participation in fishery management and consideration should be given both to extending its tenure and to bringing its status into line with other Fishery Management Advisory Committees. It is noted that to do this would imply a policy position that Indigenous fisheries in NSW have equivalent status to other fishery sectors (i.e. quite separate from the recreational sector).

Relevant actions from the IFS Implementation Plan, that will help to promote ecologically sustainable and culturally appropriate practices in the Abalone Fishery include:

- develop and facilitate a model for community input to fishery management planning (and marine park management) and progressive involvement in fishery management strategies (to be completed in 2004);
- review current Indigenous cultural access to fisheries, review options with IFS Working Group and prepare advice after reviewing input from communities;
- cultural awareness training completed for all existing DPI staff, all management advisory committees and new DPI staff (as part of Induction);
- project manager to identify strategies to maintain levels of Indigenous involvement in commercial fishing;
- develop an employment strategy for DPI in consultation with the IFS Working Group (completed June 2003); and
- review aquaculture and commercial fishing opportunities, consult with IFS Working Group and prepare advice to communities on the skills required to sustain these businesses.

The development of mechanisms to enhance Indigenous participation in the commercial fishing sector generally is a very high priority for the IFS Working Group, and was the subject of a workshop to develop an action plan during 2003 (see Callaghan and Associates 2003). The workshop resulted in several recommendations that have implications for the draft abalone FMS (Callaghan and Associates 2003). These include:

- consultation with Aboriginal people about the concept of identification of Indigenous commercial fishers on their licences (and whether Indigenous fishing licences could have special conditions attached to them);
- endorse the goal of retaining Indigenous people in commercial fishing and demonstrate this through investigating options for licence transfers, sub leasing of licences, and assistance with gaining new licences;
- training for Aboriginal fishers, both to enhance employment prospects as crew and to support operations as licensed fishers; and
- consider new structures and any special training for involving Aboriginal people in Management Advisory Committees, potentially using the models described in the Boomanulla Statement.

As noted in **Section 5**, consultation with the IFS Working Group during the current project resulted in recommendations from group members for:

- recognition of the concept of ‘cultural catch’ as a separate type of fishing to recreational or commercial;
- an employment strategy to enhance the participation of Aboriginal people in the commercial abalone industry; and

- support for Aboriginal people to become members of ABMAC (both in terms of multiple nominees to attend meetings, and support to ensure that information from ABMAC reaches local communities.

8.4 ABALONE CODE OF CONDUCT

A voluntary Code of Conduct is being prepared for the Abalone Fishery in NSW. Several of the objectives and principles of the proposed Code are relevant to the appropriate management of interactions between Indigenous community values and the commercial fishery.

The Code seeks to promote ecologically sustainable development of the abalone industry (aquatic resources and their environments), and to formalise sound management practices that take into account economic, social, environmental, technical and biological factors. Interactions with Indigenous fishers and places of value to the Indigenous community are considered as a social factor influencing the reputation of the abalone industry for best practice sustainability management. The Code does not address whether or not the current allocation of access to the abalone resource between commercial, recreational or Indigenous fishers is appropriate. This is a separate policy issue, outside the day to day management of the commercial sector.

Relevant components of the Code include are noted below.

Ecological Sustainability and Threatened Species

- Support actions to encourage the conservation of essential fish habitats and the rehabilitation of fish populations and habitats.
- Minimise the impact on natural resources and habitat by imposing and adhering to size limits, closed areas or closed seasons as appropriate.
- Be aware of and abide by NPWS regulations relating to boating operations in the vicinity of marine mammals, and participate in a reporting program for identifying areas where threatened species occur.

Fishery Compliance

- The abalone seafood industry will not tolerate damage to the sustainable productivity of fisheries by the illegal acts of others.
- Report observations of illegal fishing to DPI.

Indigenous Sites

- Be aware of known locations of items and sites of significance to Indigenous people and become aware of newly discovered locations as this information becomes available.
- Harvest around the location of items and sites of significance to Indigenous people in an appropriate manner that respects the value of the items and sites to Indigenous people.

8.5 OBJECTIVES OF THE ABALONE FMS

The draft abalone FMS includes a range of goals and objectives that are intended to respect and protect the interests of Indigenous people in the management and resources of the fishery. In

addition to the objectives that are directly relevant to the interests of Indigenous people, a number of objectives also address issues that are of interest to Indigenous people, in relation to sustainable management of the natural resources that are targeted by the fishery, and the sharing of information about the condition of those natural resources.

Table 8.1 summarises the relationship of Indigenous community values and objectives, IFS Implementation Plan priorities and draft abalone FMS objectives/management responses.

Table 8.1 – Abalone Management

Abalone FMS Objective	IFS Implementation Plan Priority Actions	Indigenous community values and objectives	Recommended Action
<p>Goal 1: Manage commercial harvesting of abalone to promote the conservation of biological diversity in the coastal environment</p> <p>Objective 1.1: Increase knowledge and minimise any adverse impacts on harvesting abalone on bycatch, associated habitats and ecosystems</p> <p>1.1(b) Continue to develop and implement the NSW Abalone Code of Conduct to minimise the impact of harvesting abalone on bycatch species, associated habitats and ecosystems</p>	<p>The IFS does not include specific actions about biodiversity outcomes from existing commercial fisheries, but is based on the premise that Aboriginal people would have, in the past, and continue to access a range of species that overlap both with the target species of commercial fisheries and with the bycatch of commercial fisheries.</p> <p>Strategies that reduce bycatch and enhance the biodiversity performance of commercial fisheries benefit the overall objectives of the IFS</p>	<p>Both during informal consultation discussions and in policy statements such as Boomanulla, the Aboriginal community has consistently referred to the sustainability credentials of traditional Indigenous fishers. Strategies that aim to reduce the biodiversity impacts of the commercial sector are therefore likely to be supported by the Indigenous community</p>	<p>Keep the Indigenous community informed about progress in this regard.</p> <p>This can be achieved by ensuring that the Indigenous community is represented on ABMAC, by information provided by Fisheries officers and by other general community information about the extent to which biodiversity protection outcomes are being achieved.</p>
<p>Goal 2: Maintain or rebuild the biomass of abalone at or above the level observed in 1994.</p> <p>Objective 2.2: To improve the efficiency of harvesting and investigate the potential of techniques to rebuild populations of abalone</p> <p>(note these actions relate to reseedling, moving abalone short distances, closures, and habitat rehabilitation investigations)</p>	<p>The IFS addresses Indigenous access to fishery stocks, as well as the development of employment opportunities in (or associated with) the commercial sector. There are indirect opportunities for Indigenous people through restocking or rehabilitation programs, both in terms of employment and in terms of sufficient resource for productive discussions about appropriate sharing of access.</p>	<p>During consultation about the draft FMS, Indigenous community representatives commented on the recent decline in abalone stocks and on potential strategies to restore the Abalone population along the coast. They have commented on closures, habitat rehabilitation and potential Abalone hatchery businesses as a means of gaining involvement in the fishery, as well as contributing to the restoration of stock.</p>	<p>Keep Indigenous communities informed about potential restocking/rehabilitation strategies, including closures (from a compliance perspective) and abalone breeding programs.</p> <p>Apart from providing for effective participation in ABMAC (i.e. specific support for Indigenous participation), DPI and the Abalone industry could involve Aboriginal groups in the development of Abalone aquaculture/breeding for restocking.</p>

Table 8.1 – Abalone Management (cont)

Abalone FMS Objective	IFS Implementation Plan Priority Actions	Indigenous community values and objectives	Recommended Action
<p>Objective 2.3: To address impacts from factors external to the Abalone Fishery.</p> <p>2.3(b) Continue to support initiatives to refine estimates of total catch of abalone, including commercial, recreational, Indigenous and illegal catches.</p> <p>The accuracy of estimates of non commercial catch directly impacts on the robustness of stock assessment information. Note that the 12 month survey of recreational fishing in NSW (2000-2001), part of the National Recreational and Indigenous fishing Survey, was not designed to produce precise estimates of the recreational catch of Abalone.</p>	<p>Current estimates of Indigenous catches are patchy and often qualitative. The IFS recommends further documentation of Indigenous fisheries, including species preferences, time of catches and total catch, to better understand the extent of interaction between Indigenous fishers and the other sectors, as well as to clearly demonstrate the demand that Indigenous fishers place on limited resources (relative to other commercial, recreational and poached demand)</p> <p>Although the National Survey has provided valuable baseline data on Indigenous fishing in northern Australia, as noted above the detail of the statistics available for NSW is not great, and the sample size reported in the Interim Report is small. The work by Schnierer and Faulkner demonstrates that there is a great deal of community information available on species, methods and on fishing purpose and value.</p> <p>DPI and the Centre for Indigenous Fisheries at SCU have proposed a three year research project aimed at developing a better understanding of all facets of Indigenous fisheries.</p>	<p>Communities value access to marine resources close to the beaches and headlands of the NSW coast for customary or traditional fishing and for community subsistence. The species that occur on rocky headlands, nearshore reefs and islands, along beaches and in the shallow marine waters close to shore are an important part of contemporary Indigenous community diet. Different species are targeted at different times of year with the aim of providing food for the whole community (or at least an extended family group).</p> <p>Indigenous community fishing targets the same species as the Abalone Fishery, although abalone is just one of a wide variety of species targeted.</p> <p>Access to fish species or to places for the purpose of teaching younger members of the community about traditional values, particularly respect. In general, these places and species are those that occur on or near to the shore.</p> <p>The Aboriginal community has expressed clear aspirations for developing opportunities for greater direct participation in the commercial sector</p>	<p>Make constructive communication with Indigenous communities a priority, providing opportunities to collaborate in the management of the fishery, rather than be considered as part of the “problem”.</p> <p>Provide funds and other support for projects that will clarify and document Indigenous community fishing practices and contexts. The design and implementation of these projects should be culturally appropriate and should be developed in association with the IFS Working Group. Indigenous cultural fishing interacts closely with the Abalone commercial sector and this relationship needs to be objectively understood.</p>

Table 8.1 – Abalone Management (cont)

Abalone FMS Objective	IFS Implementation Plan Priority Actions	Indigenous community values and objectives	Recommended Action
<p>Objective 2.3(d): ABMAC will provide advice on proposed aquaculture developments in NSW that have the potential to affect Abalone populations. An example is the proposal by the Abalone Development Company is a partner in the Memorandum of Understanding to develop a hatchery (for Abalone reseeding and oysters) as part of a Marine Centre in Eden; other partners include oyster farmers and the Local Aboriginal Land Council</p>	<p>The IFS has a specific action relating to Indigenous involvement in aquaculture projects. See also above re Indigenous community willingness to participate in both hatchery programs and other restocking strategies, particularly where such strategies will also provide opportunities for Aboriginal people to gain employment and training in the commercial sector.</p>	<p>The Eden proposal involves the Local Aboriginal Land Council and the concept in broadly in line with suggestions from community representatives.</p>	<p>Continue to involve local Aboriginal communities and the IFS Working group in discussions about the development of aquaculture ventures that would contribute to restocking of Abalone (and other species with potential commercial and traditional value)</p>
<p>Objective 2.3(e): continue to communicate with Government and other stakeholders about other factors with the potential to affect Abalone populations to minimise any impacts of external activities on Abalone stock. Most communication will be through ABMAC, where many other sectors/interests are represented, including Nature Conservation Council, recreational and Indigenous sectors.</p>	<p>Indigenous fishing for Abalone is an “external factor”, whose dimensions are not well documented. The IFS refers to ongoing documentation of Indigenous cultural access to Abalone, and to improving representation of Aboriginal people in the management of the commercial sector. Continue to support cultural awareness training for DPI staff</p>	<p>Community representatives believe that Indigenous fishers are unfairly targeted in enforcement action. Whilst most Indigenous exceedances of bag limits appear to be small and can be culturally explained, the community also acknowledges that some people are taking larger quantities of Abalone (but still within the range of what they may have taken for small scale mixed commercial purposes in the past).</p>	<p>Improved communication between the Abalone divers, DPI and Indigenous communities is essential, but this communication needs to be supported by sound information on catches, poaching, stocks etc, so that Indigenous fishing activity is seen in perspective. Some of the management issues about appropriate sharing of access to the resource are outside the scope of the draft abalone FMS. However, until these broader policy issues are addressed, there are likely to continue to be conflicts between Aboriginal community fishers and the commercial sector. Support full Indigenous participation in ABMAC, including measures for representatives to communicate outcomes of discussion back to the local community level.</p>

Table 8.1 – Abalone Management (cont)

Abalone FMS Objective	IFS Implementation Plan Priority Actions	Indigenous community values and objectives	Recommended Action
<p>Goal 5: To appropriately share the resource and harvest abalone in a manner that minimises negative social and economic impacts</p> <p>Objective 5.1: Mitigate negative impacts of the Abalone fishery on Aboriginal cultural heritage.</p> <p>5.1(a) Manage the Abalone fishery in a manner consistent with the IFS and Implementation Plan and participate in any review of that Strategy</p> <p>Note that the IFS recognises traditional cultural fishing and encourages the involvement of the Aboriginal community in the stewardship of fishery resources. The key point of contact for the Abalone Fishery with the Indigenous sector is via ABMAC, which has a position for an Indigenous representative.</p>	<p>The IFS includes several strategies to reduce current negative social and economic impacts of the ways in which access to the Abalone resource is shared:</p> <p>Develop and facilitate a model for community input to fishery management planning (and marine park management) and progressive involvement in fishery management strategies (to be completed in 2004);</p> <p>Cultural awareness training completed for all existing DPI staff, all management advisory committees and new DPI staff (as part of Induction);</p> <p>Project manager to identify strategies to maintain levels of Indigenous involvement in commercial fishing;</p> <p>Develop an employment strategy for DPI in consultation with the IFS Working Group (completed June 2003);</p> <p>Review aquaculture and commercial fishing opportunities, consult with IFS Working Group and prepare advice to communities on the skills required to sustain these businesses.</p>	<p>The enforcement of the current allocation of access to abalone stock underlies significant social and economic disadvantage to the Aboriginal community. Impacts on physical evidence of traditional fishing is not the issue, but impacts on modern manifestation of traditional practices are a high profile issue.</p> <p>To ensure that there is clear and open communication between fishery managers and the Indigenous community about catches, methods, impacts, benefits and opportunities to be involved in management;</p> <p>To enhance the skills and capacity of the Indigenous community to participate in the fishery sector, both as fishers and in terms of active involvement in the Management Advisory Committee.</p> <p>To ensure that the Abalone Fishery is managed in a manner that is consistent with sustainable resource use – i.e. that does not result in irreversible damage to habitats, or irreversible decline in the abalone population.</p>	<p>Provide awareness training for abalone licence holders; other commercial fishers; and ABMAC members and encourage discussion about Indigenous rights and interests and how they can be accommodated in the commercial sector.</p> <p>Maintain liaison with the IFAC about the community input model for ongoing management of the fishery. Enhance Indigenous participation in the Abalone MAC.</p> <p>Consider whether the Boomanulla model or other models would enhance Indigenous input to fishery planning</p> <p>In overall fishery management planning (not restricted to the abalone FMS) identify the most appropriate opportunities for community capacity building and investment support, in terms of generating employment and income.</p> <p>Further progress the actions identified in the Discussion Document and Action Plan for Enhancing the Participation of Indigenous People in Commercial Fishing (2003), with particular attention to additional consultation requirements and review of Fisheries policy.</p>

Table 8.1 – Abalone Management (cont)

Abalone FMS Objective	IFS Implementation Plan Priority Actions	Indigenous community values and objectives	Recommended Action
<p>5.1(b) To raise the awareness of commercial Abalone divers about traditional value of Abalone to Aboriginal people and the way that this traditional value is reflected in contemporary Indigenous communities. Note some information to assist with this will be provided with the Abalone Code of Conduct.</p>	<p>Cultural awareness training completed for all existing DPI staff, all management advisory committees and new DPI staff (as part of Induction);</p>	<p>To ensure that there is clear and open communication between fishery managers and the Indigenous community about catches, methods, impacts, benefits and opportunities to be involved in management</p>	<p>Further consultation with Elders in all regions along the coast to clarify how any impacts that have been identified can be managed to minimise risks to Indigenous community values. Include cultural awareness information and protocols in the Abalone Code of Conduct. Support Indigenous participation in ABMAC.</p>
<p>5.1(c) Work in partnership with Indigenous communities to develop culturally appropriate compliance protocols in relation to abalone fishing.</p>	<p>Implement youth conferencing and warning scheme for young offenders. Consult with IFS Working Group on fisheries compliance after Indigenous Fisheries Officers in place.</p>	<p>To ensure there is clear and open communication between fishery managers and the Indigenous community about catches, stocking rates, impacts on Abalone stock. Equally important is an ongoing review of how access to the resource is shared, and how compliance is enforced across different cultures. The harvesting of abalone is highly regulated and non-compliance can have a detrimental effect on efforts to sustain the population. Compliance with such regulations requires that the reasons for illegal fishing are understood and addressed. The status of Indigenous fishers (practicing cultural fishing or commercial fishing) requires clarification.</p>	<p>Further and ongoing consultation with Elders and other Indigenous community members regarding compliance protocols. Whilst compliance issues do not relate only to Abalone, the impacts of enforcement of Abalone bag limits contribute significantly to conflict between the commercial sector and Aboriginal people. Active participation of Elders and appropriate community members in compliance controls (e.g. see circle sentencing etc).</p>

Table 8.1 – Abalone Management (cont)

Abalone FMS Objective	IFS Implementation Plan Priority Actions	Indigenous community values and objectives	Recommended Action
5.1(c) Work in partnership with Indigenous communities to develop culturally appropriate compliance protocols in relation to abalone fishing (cont)		Additionally, the implementation of protocols requires a partnership approach with the Indigenous community rather than controls being imposed by DPI. Objective 5.1c aims to address this issue by encouraging effective Indigenous participation in the ABMAC, and continuing the liaison between Fisheries officers and communities, particularly Elders.	
5.1(d) To raise the awareness of commercial fishers, recreational fishers and DPI about the traditional value of abalone to Aboriginal people and the way that this traditional value is reflected in contemporary Indigenous communities.	Cultural awareness training completed for all existing DPI staff, all management advisory committees and new DPI staff (as part of Induction); Develop a culturally appropriate participation process for Indigenous people, so that they can contribute to the management of the fishery.	There is a general perception in the Indigenous community that traditional rights have been misunderstood, misrepresented or overlooked in past dealings with DPI, and that the Aboriginal cultural perspective continues to be derided. The NSW Aboriginal Land Council has stated that in order for traditional cultural fishing strategies to be protected and enhanced, ‘a philosophic and practical recognition of the traditional and cultural fishing heritage of Aboriginal people and communities, including their access to and use of the fisheries resource’ is required. Recognise cultural catch over and above the recreational catch	Provide awareness training for abalone licence holders; other commercial fishers; and ABMAC members and encourage discussion about Indigenous rights and interests and how they can be accommodated in the commercial sector. Maintain liaison with the IFAC about the community input model for ongoing management of the fishery. Enhance Indigenous participation in the ABMAC.

Table 8.1 – Abalone Management (cont)

Abalone FMS Objective	IFS Implementation Plan Priority Actions	Indigenous community values and objectives	Recommended Action
<p>Goal 7: Achieve a high level of compliance within the Abalone Fishery</p> <p>Objective 7.3 : To continue to minimise the illegal catch of Abalone</p> <p>(b) examine the costs and benefits of increasing effective enforcement to reduce illegal catch and assist in maintaining the fishery biomass relative to other stock rebuilding measures.</p>	<p>The IFS refers to cultural awareness training for Fisheries officers to improve the effectiveness of communication about enforcement measures in relation to Abalone bag limits for Indigenous fishers.</p> <p>The IFS includes reference to aquaculture projects for Indigenous people as a means of enhancing skills and participation in the commercial sector.</p>	<p>Community representatives have frequently expressed concern about what they regard as inappropriate targeting during compliance activities.</p> <p>Community members have also expressed strong interest in activities to restore stocks and protect biodiversity (See 5.1(c) above)</p>	<p>Explore opportunities to move the focus of communication with Indigenous fishers about management of Abalone stocks/biomass to constructive measures such as restocking programs rather than small scale compliance breaches (i.e. costs and benefits of participation in the solution to the stocking issue, rather than exclusion)</p>
<p>Goal 8: Ensure adequate stakeholder involvement and community consultation</p> <p>Objective 8.1: to ensure the ABMAC communicates effectively with shareholders, other industry sectors and other stakeholders</p> <p>(d) Explore ways to improve the communication between ABMAC and Indigenous people, in a culturally appropriate manner.</p> <p>(e) Encourage Indigenous access to the abalone resource through involvement in the commercial fishery.</p>	<p>Create an Indigenous Fisheries Officer position to work with Indigenous communities and inside DPI to implement culturally appropriate fishery resource management and compliance processes.</p> <p>Develop and facilitate a model for community input to fishery management planning (and marine park management) and progressive involvement in fishery management strategies (to be completed in 2004)</p>	<p>The diversity of the Aboriginal community needs to be taken into account when consultation is being undertaken. An appropriate time frame is required during consultations in order that the entire Indigenous community is given an opportunity to provide input.</p> <p>Aboriginal people can demonstrate a long term involvement in the Abalone Fishery, both for cultural reasons (to feed their families) and as small scale commercial operators. Several Indigenous families on the south coast have previously held general fishing licences that allowed them to gather a small amount of abalone for commercial purposes, and there is ample evidence of long standing traditions and skills in diving.</p>	<p>The IFS working group has suggested several actions to enhance participation in ABMAC and the flow of information from ABMAC to Aboriginal communities:</p> <ul style="list-style-type: none"> • DPI action on previous notifications of people willing to participate • Two nominated representatives on ABMAC • Provide resources for the nominated representatives to provide feedback to and from their communities • Use community based “expert panels” as part of the consultation process, with meetings in localities that are relevant to the community issues. • Recognise the IFS working Group as a MAC in the same way as other MACs

Table 8.1 – Abalone Management (cont)

Abalone FMS Objective	IFS Implementation Plan Priority Actions	Indigenous community values and objectives	Recommended Action
		Constraints to current commercial involvement include the lack of capital in the Indigenous community compared with the high entry cost of licences.	<ul style="list-style-type: none"> • It may be possible to negotiate purchase of licences on a community basis. • There may also be opportunities for Indigenous involvement in the industry through aquaculture.

8.6 KEY ACTIONS FOR MANAGING INDIGENOUS VALUES AND INTERESTS IN THE FISHERY

Four key actions emerge from the analysis of draft abalone FMS objectives in relation to IFS and Aboriginal community objectives and comments. Further details about the intent and potential implementation of these actions are provided in **Sections 8.6.1 to 8.6.4**.

The extent to which these four actions are implemented in the ongoing management of the Abalone Fishery underpins the extent of risks posed by the commercial fishery to Indigenous community values and concerns. Potential risks are summarised in **Section 9**.

8.6.1 Documentation of Indigenous Fisheries and Conservation Approaches

There is now abundant general evidence of the social, cultural and economic importance of fishing to coastal Aboriginal communities, both in traditional times and in contemporary communities. There are also some detailed studies in individual communities about fishing as an element of the cultural landscape (e.g. Yarrawarra people on the Mid North Coast). The mix of fish species, places of social or cultural value and the economic importance of fishing is less well explored in case studies from the NSW South Coast, where the abalone industry is concentrated.

The importance of Indigenous fishing activity is an issue across all commercial fishery sectors and should not necessarily be resolved by research funded by individual commercial fisheries.

In this context, there would be value in DPI supporting projects that will clarify and document Indigenous community fishing practices and contexts. The design and implementation of these projects should be culturally appropriate and should be developed in association with the IFS Working Group. The task would involve consultation with Elders groups in all regional communities, to document the species that are important and any places that are linked to stories about those species. This information would form the basis for any negotiation about the management of critical species or places in any region.

The cultural research will provide information to help to clarify the relationship between Indigenous abalone fishing and the commercial sector.

8.6.2 Equitable Sharing of Access to Limited Resources

Sharing the fishery resource requires consideration of commercial fishery participation as well as minimising impacts on traditional or cultural fishing practices. The DPI legislation does not provide for 'affirmative action' type strategies or regulations in relation to Indigenous access to and participation in the abalone or any other commercial fishery. This situation cannot be remedied only in relation to abalone fishing.

It is likely that the first step in the process would be consideration of changes to the Fisheries Management Act to specifically identify Indigenous fishing rights and practices.

The recommendations arising from the 2003 workshop on enhancing Indigenous participation in commercial fishing (Indigenous Fisheries Advisory Committee) provide a basis for continuing research, consultation and advice about how opportunities for Aboriginal people to participate in commercial fishing, generating employment and economic benefits for regional communities, can be enhanced.

The draft abalone FMS includes an action to encourage Indigenous participation in the commercial abalone sector, which may provide new benefits or opportunities for skilled

Indigenous fishers as well as allowing communities to maintain traditional skills and respect. This is a first step towards restoring and enhancing Indigenous economic participation in an industry which has clearly been part of the lifestyle and heritage of coastal Aboriginal people for generations. However, the key actions to achieve enhanced Aboriginal commercial participation are outside the scope of the abalone FMS alone. They are a primary focus of discussions between the Indigenous Fisheries Advisory Committee and DPI. It is appropriate that representatives of the abalone sector are involved in these ongoing discussions and that the abalone FMS is reviewed as new initiatives are adopted to ensure that it reflects emerging policy and statutory positions.

8.6.3 Indigenous Participation in ABMAC

Many of the issues surrounding the relationship between the commercial abalone sector and Indigenous communities are compounded by poor communication practices. Although there is a place reserved for an Indigenous community representative on ABMAC, no-one currently represents the views and concerns of the Aboriginal community on the Management Advisory Committee.

Enhanced communication and participation are fundamental to improved understanding of the positions of both groups of stakeholders (and others).

Aboriginal people have provided a number of reasons for the current lack of involvement and have also suggested options to provide an additional level of support that would encourage Aboriginal community participation. As noted in **Table 8.1**, these options include:

- a simple process for electing or appointing Indigenous representatives to ABMAC;
- the appointment of a minimum of two Indigenous representatives to ABMAC at any one time. There is a further option that one of these representatives would be an observer rather than a full member of the Committee, but the intent is to provide culturally relevant support to the Indigenous community representative in the committee context;
- if necessary, newly appointed Indigenous representatives on ABMAC should be provided with training in Committee procedures etc so that they can function effectively;
- consideration should be given to providing financial support to ensure that Indigenous community representatives on ABMAC are able to provide feedback to and from their constituency, noting that interested Indigenous community are scattered over a large geographic area, often have limited resources to travel/attend meetings and may be elderly;
- cultural awareness training for other members of ABMAC to assist in mutually useful conversations; and
- a further option is to set aside specific workshop sessions in the ABMAC agenda, which might involve a wider range of Indigenous community representatives.

The draft FMS does not currently provide a definite position on any of these options. An early task for ABMAC under Goal 8 of the draft FMS is to consult with the IFS Working Group about the best approach to improved Indigenous community representation on the Committee.

8.6.4 Improved Communication of Intentions and Progress

Whilst improved representation of Indigenous interests on ABMAC will greatly facilitate communication between industry representatives and the Aboriginal community, a broader industry and agency communications strategy is also important. This communications strategy must differentiate between those matters which are broad policy decisions for DPI (such as review of the management of Indigenous fisheries under the Fisheries Management Act), and those matters which are part of best practice management for the abalone industry.

The Abalone Code of Conduct will contribute to improved communications, by stressing the importance of increased awareness of Indigenous community issues amongst licensed divers.

Cultural awareness training for the commercial sector, coupled with business skill and meeting skill training for Indigenous community representatives will both contribute to improved communication. Similarly, although most DPI officers have now received cultural awareness training, in accordance with the IFS Action Plan, ongoing support in this regard is very important.

Given that much of the dissent between Indigenous and commercial fishers is about the sustainability of the resource, it is important to develop effective ways of providing information to all stakeholders about trends in abalone stocks and reasons for those trends, as well as the success of measures to stabilise or enhance species biomass.

9.0 IMPACT EVALUATION AND RECOMMENDATIONS

Indigenous communities along the NSW coast have a long standing and important relationship with marine resources. Currently available information suggests that the most important habitats and species are those along the beaches and rocky headlands and in shallow nearshore waters. Abalone is targeted by both commercial fishers and Indigenous fishers within this environment. This overlap has created some tension between these sectors.

The Planning guidelines for this assessment require that the **risks** to Indigenous people's values are noted, both for the current situation and with the strategies nominated in the draft FMS in place. The impact assessment has addressed seven key issues about the relationship of commercial Abalone fishing and the fishery practices and values of the Indigenous community. These issues are noted in **Table 9.1**, together with a summary statement about the anticipated risk to Indigenous values with current management and with the strategies noted in the draft FMS in place.

The concept of risk incorporates both a probability factor (how likely an impact is to occur) and a consequence or magnitude factor (how severe the impact would be). A standard risk assessment approach is difficult to apply with the type of information that is available about Indigenous fishery and marine habitat values. **Table 9.1** therefore presents a simple qualitative assessment and ranking of risk.

Table 9.1 indicates that the objectives and actions proposed in the draft abalone FMS will generally lower existing risks to Indigenous values. The FMS will not result in additional impacts on Aboriginal sites or places, and the measures proposed are expected to further reduce any small existing impacts. Two areas would benefit from further research and consultation and the information arising from these studies would greatly enhance the certainty that risks are being effectively managed.

The first key issue for further research is to obtain more information about traditional cultural fishing practices in all regions of the NSW coast. This should include fishing practices, fishing purpose, participation, locations, links to totems, places and other objects of value to local Aboriginal communities.

The second issue is to further explore measures to encourage (restore) and maintain Aboriginal participation in the commercial sector, including the Abalone Fishery. Participation can be achieved in relation to management, separately from participation as a licence or shareholder in the first instance. Improved participation in the management of the fishery can be achieved by measures to support Indigenous involvement in ABMAC and other communication strategies. These should help to enhance understanding and mutual respect.

It should not be anticipated that the broader issue of Indigenous participation as shareholders/licence holders or as a recognised separate groups of fishers, cannot be resolved through the abalone FMS alone. However, abalone fishers and the Indigenous community should both participate in discussions about potential changes to the Fisheries Management Act and the potential introduction of affirmative action programs to enhance Indigenous capacity to enjoy their rights to economic independence.

Close interaction between the IFS Working Group and ABMAC will also help to foster employment and other commercial opportunities. The implementation and review of the draft abalone FMS, in association with the IFS, is likely to have some benefits for Indigenous stakeholders.

Table 9.1 - Summary of Risks to Indigenous Values, with FMS Strategies in place

Broad issue/value	Risk – existing management	Risk – FMS strategies implemented
Aboriginal sites – the physical evidence of past Aboriginal land use	Low (low probability and moderate consequence)	Low (very low probability and moderate consequence). There is a low possibility that activities associated with commercial abalone fishing could impact Aboriginal sites along the coastline.
Aboriginal places – the locations that are associated with stories about the landscape or with personal and community totemic associations with the natural world	Low	Low. Some headlands, islands and rock platforms are known to be places of cultural value, and are often associated with stories. There is a small risk that commercial Abalone harvesting could impact on these places, due to lack of information about how they are valued by the Aboriginal community. Further involvement of Aboriginal people in ABMAC will minimise this risk.
Aboriginal marine totem species	Low	There is limited detailed documentation about Indigenous totem species in the NSW marine environment and the significance of impacts on/risks to these values is therefore difficult to determine. Whilst there can be no doubt that some totem species are target species in some commercial fisheries, the extent of concern to Aboriginal people needs further clarification. Initial steps to reduce risk involve further consultation with Aboriginal people, particularly Elders.
Aboriginal cultural landscapes – the places and species in the landscape that are important to Aboriginal people. As a separate issue from Aboriginal places, this refers to the presence and distribution of Aboriginal foods and medicines in the marine landscape	Low to moderate	Low – risk will be reduced as better information about species of concern to communities along the whole coast become better documented and Indigenous participation in fishery management is enhanced.

Table 9.1 - Summary of Risks to Indigenous Values, with FMS Strategies in place (cont)

Broad issue/value	Risk – existing management	Risk – FMS strategies implemented
Traditional fishing and access to fisheries resources.	High. The Aboriginal community has argued strongly that the current classification of Indigenous fishers as recreational rather than cultural fishers is significantly in conflict with traditional fishing practices and rights. In addition, licensing arrangements for Indigenous recreational fishers in coastal areas are more restrictive than those for Indigenous recreational fishers in inland areas. Divergent perceptions of rights and access between Indigenous fishers and the commercial sector have affected community relations on the NSW South coast	Moderate to high. Resolution of this issue is outside the scope of an individual FMS, and requires broader policy decisions by DPI. This means that the abalone FMS, by itself, cannot significantly change the current risks to traditional access. The fundamental issue is about how access to the overall Abalone resource is shared between commercial, recreational and cultural fishers and how compliance with these shares is enforced. Whilst Indigenous fishers are operating outside the licensed commercial or recreational sectors, there is limited information available about actual Indigenous catches and therefore little information to qualify discussion about impacts on Abalone stock.
Aboriginal socioeconomic participation in the commercial fishing sector.	Moderate – currently very low participation	Low to moderate – there is potential for the strategy facilitate enhanced opportunities for economic participation and skill development, in association with the actions that are priorities in the IFS and are further explored in the Indigenous Commercial fishing opportunities action plan. Adoption of key recommendations of the Indigenous Fisheries Advisory Committee will help to open up opportunities and reduce the risk that commercial fishing strategies present to Indigenous rights.
The implications of the current and proposed fishery regime on Indigenous communities’ well being, including economics, employment and community viability	Moderate. Whilst access to Abalone fishery resources is not the only event or the principal driver of disadvantage, current tensions about access to the resource have a major impact on some Aboriginal families on the south coast, compounding issues associated with unemployment, family members in jail, housing issues etc. Issues associated with the Abalone resource reflect and add to similar issues associated with limited access to other commercial fisheries, with the impacts being associated with day to day subsistence fishing, rather than special events.	Moderate and potential reducing to low over time. Fishery access issues and associated community social impacts will not be resolved through the abalone FMS alone. The adoption of measures to enhance communication - through cultural awareness training, employment training/opportunities, improved representation and resources for communication through ABMAC and improved relations with Fishery compliance officers will all contribute to a reduction in risks to Aboriginal community social and cultural values. However, some fundamental access/sharing issues need to be resolved outside the framework of individual FMS, and any new arrangements subsequently fed back into reviews of the FMS.

10.0 REFERENCES

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PART 2

11.0 HISTORIC HERITAGE

This part of the assessment addresses the issues identified in Part B 5(e) and Part E 3.2(c) of the *EIS Guidelines for the Abalone Fishery*, issued by DIPNR in February 2003 (see **Section 1.1**).

The key issue arising from these requirements is an assessment of the relative risks presented to historic heritage sites and values (but principally shipwreck sites) by the current management strategies for the Abalone Fishery and by the proposed management of the fishery.

The activities associated with diving for and taking abalone have a low potential to have an impact on cultural heritage values. In broad terms, the potential risks to historic heritage derive from direct impacts by vessels on shipwrecks.

As noted in the DIPNR Director's Requirements, risk comprises a combination of probability and consequence. Risk assessment concepts and methods are defined in Australian Standard (AS) 4360:1990. Risk assessment processes can vary from qualitative preliminary considerations which use broad consequences and likelihoods to give an understanding of comparative risk, to highly quantified assessments that provide detailed ranking of the risks associated with all aspects of a proposal or operation. For the purposes of this assessment, detailed quantification and ranking of risks is not considered necessary and risk has been considered in qualitative terms.

11.1 STRUCTURE OF THIS ASSESSMENT

The assessment reports the results of a review of the historic heritage that is located off the southern NSW coastline. The review of historic heritage has defined those elements of the resource that are, or appear to be, located in such a position that either abalone fishing commercial operation might have some impact on an element or vice versa.

For the purposes of this report, historic heritage has been confined to the transport context having regard to the location of the study area. It is considered unlikely that other types of historic heritage (buildings, wharves etc) will have any interaction with the Abalone Fishery (undertaken in the intertidal zone). The transport context is specifically represented in the record of shipwrecks.

This assessment therefore addresses shipwrecks that have been recorded in offshore NSW and Australian waters. It is heavily based on data contained in the 'Maritime Heritage Online – NSW' database (the database), which is maintained by the NSW Heritage Office. Only a sample of the information from the database has been analysed (the Illawarra and South East regions). The analysis that is presented demonstrates that shipwrecks are common right along the southern NSW coast in waters used by abalone fishers.

Sections 11.2 and 11.3 of the assessment identify the sources of information that have been used to provide guidance on the nature and location of shipwrecks in NSW coastal waters. This section also reviews the statutory controls that must be taken into account by fishery managers where there is potential for trawling activities to interact with shipwreck sites.

Section 11.4 of the assessment describes the results of database searches, with particular reference to the accuracy and reliability of entries. This section also provides information about the concept of significance. The significance of a site is an important factor when considering the risks associated with the interaction of the fishery and the cultural heritage resource.

Section 11.5 reviews the objectives and actions that are identified in the draft FMS, and considers whether these actions adequately reduce or manage the potential risks to heritage values.

11.2 METHOD – DATA COMPILATION AND ASSESSMENT

For this component of the study, the sources of data were the database with additional source material obtained from:

- *The Register of British Shipping*;
- Annual reports of government departments, particularly in the latter quarter of the 19th Century;
- The Register of the National Estate, maintained by Environment Australia;
- The (NSW) State Heritage Register, maintained by the NSW Heritage Office;
- The (NSW) State Heritage Inventory, maintained by the NSW Heritage Office;
- *Bar Dangerous: A Maritime History of Newcastle* (Callan 1986) and *Bar Safe* (Callan 1994);
- Index of shipwrecks on the NSW Coast Between the Hawkesbury and Manning Rivers, 1788-1970 (Fletcher nd);
- *Australian Shipwrecks* (Loney 1980);
- *Wrecks on the New South Wales Coast* (Loney 1993);
- *Shipwreck Atlas of New South Wales* (NSW Heritage Office 1996);
- *Centenary: NSW Steamship Wrecks* (Parsons 1995);
- *Scuttled and Abandoned Ships in Australian Waters* (Parsons & Plunkett 1998);
- Navigational charts of the coastline and estuaries; and
- Information from statewide and local newspapers.

The sources of data are collectively referred to as ‘the marine archaeological record’.

Search of the marine archaeological record indicated that hundreds of shipwrecks have been recorded along the NSW coastline. One of the difficulties posed by the database, and by the marine archaeological record generally, was that the location of many shipwrecks could not be specified with any degree of accuracy, particularly regarding shipwrecks of the 19th Century. The judgment involved in differentiating offshore from onshore and estuarine shipwrecks was guided by the following criteria:

1. Detail of the geographical location of the wreck and/or precision in description of geographical features relevant to the wreck. For example, while a wreck described as located east of Green Cape is relatively definitive, one that refers to the wreck location as

being simply ‘Port Stephens’ may refer to the estuary, or offshore or inshore but a reference to ‘Hannah ([sic: Anna] Bay’ will probably place the wreck in inshore waters.

2. The nature of the vessel’s voyage, e.g. international, inter-colonial, coastal intra-state, or port service. Thus, a vessel described only as having been wrecked ‘east of Green Cape’ in transit from Clarence River to Melbourne with sawn hardwood will have been unlikely to have been inshore at that stage of the voyage.
3. The circumstances of the loss, e.g. navigation error, failure of equipment, condition of wind and/or weather. The examples of such causes are boundless and need to be read in conjunction with criteria 1 and 2 above.

Greater precision in describing the disposition of shipwrecks might only be achieved by an exhaustive research of primary sources and is not considered necessary at this stage.

Appendix 4 tabulates the shipwrecks that are recorded in the marine archaeological record in the Illawarra and South East regions.

11.3 STATUTORY FRAMEWORK

This section outlines the historic heritage protection that is required by State, Federal and local legislation and indicates specific statutory constraints that may affect proper management of heritage resources in the context of the use of NSW offshore waters for commercial fishing.

The seventh column, headed ‘Protection’, in the database presented in **Appendix 4**, indicates against each shipwreck recorded, the level at which protection is/ or is not afforded by Commonwealth or State legislation. The level of protection is explained in **Sections 11.3.1** and **11.3.2**.

11.3.1 National Constraints

Apart from general heritage and planning legislation at Commonwealth and State levels, shipwrecks may be protected under the *Historic Shipwrecks Act 1976*. The Act applies within Commonwealth waters and, upon the declaration by a State that the Commonwealth Act so applies, to the waters of a State. New South Wales has made such a declaration. The seventh column of **Appendix 4** indicates to which shipwrecks the Historic Shipwrecks Act applies. The Historic Shipwrecks Act, s4A, sets out the base criteria for consideration of a shipwreck as historic as being that the shipwreck be:

- (a) *situated in Australian waters, or waters above the continental shelf of Australia, adjacent to the coast of a Territory; and*
- (b) *at least 75 years old.*

The Act further provides that:

- *the Minister may declare historic the remains of disturbed or fragmented shipwrecks and artefacts related to shipwrecks (s4A(5), –(6), –(7));*
- *whether or not within the base criteria, the Minister may declare historic individual shipwrecks, the individual remains of disturbed or fragmented shipwrecks and individual artefacts related to shipwrecks (s5);*

- *whether or not within the base criteria, the Minister may make a provisional declaration of a shipwreck or of artefacts associated with a shipwreck pending determination (s6);*
- *the Minister may declare a ‘protected zone’ not exceeding 200 hectares as the curtilage of a shipwreck (s7);*
- *upon publication in the Gazette of a notice declaration a shipwreck and/or site and/or article historic, a person holding an artefact related to the declaration must give it to the Minister (s9) and the minister is empowered to demand the surrender of such an article by notice (s10);*
- *the Minister may give directions as to the custody of material the subject of declaration (s11);*
- *it is an offence to destroy, damage, disturb or interfere with an historic shipwreck or artefact or to attempt to dispose of any material to which a declaration applies (s13);*
- *it is an offence to enter a protected zone with tools, explosives, equipment for diving and/or conducting any prohibited activities; to trawl, dive or undertake any other underwater activity; or to moor (s14);*
- *the Minister is empowered to issue permits to allow the exploration or recovery of a shipwreck or artefacts associated with a shipwreck (s15); and*
- *any person discovering a shipwreck or artefacts from a shipwreck must report the find to the Minister (s17).*

The Act also provides penalties for offenders against its provisions.

11.3.2 State Constraints

The seventh column of **Appendix 4** indicates shipwrecks that are listed on the NSW State heritage registers. The requirements of the (NSW) *Heritage Act* 1977 must therefore be taken into account by any management planning that affects those resources. The Heritage Act established measures for the protection of heritage resources. Heritage sensitivity may be indicated by historical research and/or by various on-site archaeological surface surveys. The basic unit for the assessment of heritage significance pursuant to the Heritage Act is the ‘relic’. The Heritage Act defines a relic as:

Any deposit, object or material evidence –

(a) which relates to the settlement of the area that comprises NSW, not being Aboriginal settlements; and

(b) which is 50 or more years old.

The Act further provides that:

- *sites and relics in a range of descriptions are protected from disturbance and damage (ss. 24-34, 35A-55B, 130, 136-7, 139) and ss. 47-52 inclusive apply specifically to ‘Protection of Historic Shipwrecks’;*

- *relics may be the subject of conservation orders (ss. 26(2)(b), 35A,36,37, 44, 48);*
- *relics in shipwrecks are protected in situ on all sites (ss. 26(2)(a), 35A,36, 37, 44, 51);*
- *if a site or relic is listed on the NSW Heritage Register no activity may proceed that will disturb, or for the discovery of, relics except with an Excavation Permit (ss. 57, 60);*
- *no activity may proceed that will disturb, or for the discovery of, relics (not subject to a conservation instrument) except with an Excavation Permit (ss. 47, 139, 140);*
- *location of relics must be reported to the Heritage Council (s. 146); and*
- *recovery of relics from excavation must be reported to the Heritage Council (s. 146A).*

The Act provides penalties for offenders against its provisions (s. 157).

11.4 RESULTS

It is clear from **Appendix 4** that it is difficult to pinpoint the locations of these wrecks, or the amount of wreckage that may still remain, with any certainty. For many wrecks, only limited, broadly descriptive information is available, and the extent to which parts of the wreck may be exposed to snagging on nets etc is difficult to determine. The condition of a shipwreck will depend on the nature of the vessel (size and type of construction), depth of water, the circumstances that caused the wreck, subsequent disturbance, and marine processes such as waves, currents and sediment transport. For many shipwrecks, little of this information is known directly.

As discussed in **Sections 11.3.1** and **11.3.2** and noted in **Appendix 4**, almost all the shipwrecks along the NSW coast are protected by either the Commonwealth heritage legislation (Historic Shipwrecks Act) or by the NSW Heritage Act.

11.4.1 The Concept of Significance

The extent to which an item of historic heritage may be a constraint to the operation of the Abalone fishery is strongly influenced by the assessment of its significance. This section explains the concept of cultural significance and the following section notes the significance that has been attributed to various heritage resources. The protection afforded by Commonwealth and State heritage and planning legislation is also noted.

The Heritage Act 1977 (NSW) defines items of environmental heritage to be:

Those buildings, works, relics or places of historic, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance for the state of New South Wales.

In the context of this report, significance is the measure of the value and importance of elements of the archaeological record to cultural heritage. While the fabric of the archaeological record is the subject of the assessment of heritage significance, the assessment itself is conditioned by the

environmental and historic context of the site. Furthermore, an evaluation of heritage significance is not static but evolutionary, as a function of evolving community perspectives and cultural values.

The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter) classifies the *nature* of cultural significance in terms of historical, aesthetic, scientific and social criteria. The implications of these classifications are as follows:

- Aesthetic significance addresses the scenic and architectural values of an item and/or the creative achievement that it evidences. Thus, an item achieves aesthetic significance if it has visual or sensory appeal and/or landmark qualities and/or creative or technical excellence.
- Historical significance considers the evolutionary or associative qualities of an item with aesthetics, science and society, identifying significance in the connection between an item and cultural development and change.
- Scientific significance involves the evaluation of an item in technical and/or research terms, considering the archaeological, industrial, educational and/or research potential. Within this classification, items have significance value in terms of their ability to contribute to the better understanding of cultural history or environment and their ability to communicate, particularly to a broad audience within a community.
- Social significance is perhaps the most overtly evolutionary of all classifications in that it rests upon the contemporary community appreciation of the cultural record. Evaluation within this classification depends upon the social spiritual or cultural relationship of the item with a recognisable community. (Marquis-Kyle & Walker 1992, 21-23).

Historical study looks to the documentary record of human development and achievement, as interpreted by the authors of the documents that comprise the primary and secondary resources. In parallel, historical archaeology is concerned not only with the documentary record but also with material evidence. The archaeological record may provide information not available from historical sources. An archaeological study focuses on the identification and interpretation of material evidence to explain how and where people lived, what they did and the events that influenced their lives. Considerations material to archaeological study include:

- whether a site, or the fabric contained within a site, contributes knowledge or has the potential to do so (perhaps, whether the archaeological record validates or contradicts the historical). If a site can contribute knowledge within the *nature* criteria above, the availability of comparative sites and the extent of the historical record should be considered in assessing the strategies that are appropriate for the management of the site; and
- the level at which material evidence contributes knowledge in terms of current research themes in historical archaeology and related disciplines.

The ‘level of contribution’ is thus a critical determinant and is assessed according to the same protocols as is cultural significance, that is, in terms of representativeness/rarity and local/regional/state associations.

In relation to ‘research themes and historical archaeology and related disciplines’, the direction of historical archaeology implies, and is conditioned by, consideration of historic, scientific, cultural, social, architectural, aesthetic and natural values. It is a convenient method of classifying the values of material evidence, within the Nature criteria above, in terms of the following broad model:

- *Historical* value lies at the root of many of the other values by providing a temporal context and continuity, thereby providing an integrating medium for the assessment of social, cultural and archaeological significance;
- *Scientific* value depends upon the ability of an item to provide knowledge contributing to research in a particular subject or a range of different subjects;
- *Cultural* value attaches to artefacts which embody or reflect the beliefs, customs and values of a society or a component of a society and/or have the potential to contribute to an understanding of the nature and process of change and its motivation;
- *Social* value derives from the way people work(ed) and live(d) and from an ability to understand the nature, process of change and its motivation. Social significance is closely related to cultural significance, in its concern with the practicalities of socio-cultural identification;
- *Architectural* value depends on considerations of technical design (architectural style, age, layout, interior design and detail), the personal consideration (i.e. the work of a particular architect, engineer, designer or builder) and technical achievement (construction material, construction technique, finish);
- *Aesthetic* value addresses the manner in which an item comprises or represents creative achievement, epitomising or challenging accepted concepts or standards; and
- *Natural* value attaches to items that either support or manifest existing natural processes and/or systems or which provide insights into natural processes and/or systems.

Within this general framework, the assessment of significance is made in the light of two distinct measures: the degree of significance and the level of significance.

- The *degree of significance* of heritage material is evaluated as being either representative or rare. *Representative* items are those which are fine distinctive, characteristic and/or illustrative examples of an important class of significant item or a significant aspect of the environment. *Rare* items are those which singularly represent or represent an endangered, discrete, or uncommon aspect of, history or cultural environment. By derivation, items considered within the context of broader investigation as being insignificant may be dismissed by an evaluation of *little or none*.
- The *level of significance* of heritage material is assessable in five classifications depending upon the breadth of its identifiable contemporary community or historical or geographical context. Thus –
 - a *local* classification recognises an item as being significant within a local historical/geographical context or to an identifiable contemporary local community;
 - a *regional* level of significance recognises the item as significant within a similar regional historical/geographical context or identifiable contemporary regional community; and
 - a *state* level of significance identifies that item as significant in a statewide historical/geographical context or to an identifiable contemporary statewide community (Heritage Office 1996, 4-7);

and by derivation:

- a *national* level of significance attaches to an item that is significant in a nationwide historical/geographical context or to an identifiable contemporary nationwide community; and
- an *international* level of significance has the appropriate connection to international context or the international community.

11.5 RISKS TO HISTORIC HERITAGE VALUES

11.5.1 The Interaction of Commercial Fishing with Historic Heritage Resources

The activities associated with commercial abalone fishing are limited to associated boating and boat management.

The physical and spatial presence of heritage resources along the ocean floor is likely to have only a marginal effect on commercial fishing operations through wreckage posing a hazard to navigation.

While navigation of boats is unlikely to pose a significant threat to shipwrecks and associated maritime relics, divers have the potential to cause disturbance, damage or destruction to submarine relics. Submarine relics are by their nature fragile while their *in situ* preservation is most frequently either precarious or on/or within a horizon of fine silt or sand. Disturbance of a relic in either of these environments can not only modify, damage or destroy a relic but alternatively or concurrently modify the environment in which it is located by moving, exposing or burying the relic.

11.5.2 Risk Considerations

Guidance on concepts for a qualitative risk assessment is provided in AS 4360. **Tables 11.1** and **11.2** summarise qualitative descriptions of likelihood and consequence. These concepts have been used in considering potential risks to historic heritage associated with the operation of the Abalone Fishery. It is stressed that the assessment presented here is preliminary and qualitative in scope.

Table 11.1 - Qualitative Description of Likelihood

Almost certain	May occur at least several times a year
Likely	May arise about once a year
Possible	May arise at least once in a ten year period
Unlikely	Likely to occur at some time during the next ten to twenty five years
Rare	Very unlikely to occur within the next twenty five years

Table 11.2 – Indicative Consequence Scales

Catastrophic	Long term harm – significant, extensive and irreparable damage to highly valued structures or locations of cultural significance
Major	Major damage to highly valued locations or structures of cultural significance
Moderate	Damage to valued structures or places of cultural significance (not likely to be permanent or irreparable)
Minor	Minor damage to places or structures of cultural value
Insignificant	Negligible damage to structures or locations of cultural value

Even with a qualitative risk assessment, it is possible to grade the risk that results, in terms of the urgency of action to reduce risk to the environment, cultural places or safety. Descriptors and indicative responses are noted in **Table 11.3**.

Table 11.3 - Qualitative Risk Descriptors

Extreme risk	Immediate action required to reduce risk
High	Urgent action required to reduce risk
Medium	Manage risk by monitoring or improving procedural guidelines etc
Low	Manage by routine procedures, unlikely to need specific additional resources

Table 11.4 presents consideration of two aspects of abalone fishing that have the potential to interact with historic heritage places (shipwrecks), and provides a preliminary evaluation of risks to historic heritage values. In an assessment conducted strictly in accordance with the National Standard, this assessment process would be conducted by a panel of people involved in the activities in question. The use of a panel ensures that all aspects of activities and risks are taken into consideration. For this process, which is intended only to provide an indication of the scope of risks to historic heritage items/sites, the assessment has referred to the data base information rather than an expert panel.

Table 11.4 - Qualitative Risk Assessment Considerations

Aspect	Likelihood	Consequence	Risk
Boat navigation – collision with shipwrecks	Unlikely to rare	Low to moderate	Low
Trapping of divers in shipwrecks	Rare	High (to diver), low to heritage item	Low (to heritage item)

The risk presented to historic shipwrecks by the activities of the Abalone Fishery is low,. No large nets or other equipment that could snag on shipwrecks are used in the Abalone Fishery and the boats used are also relatively small, with very limited likelihood of damage to shipwrecks due to collision. In this context, the types of response that would be appropriate in the FMS relate to procedures for monitoring (for instance locations, frequency and consequence) and reporting any incidents that do occur.

The draft FMS requires that fishers respond to new information about heritage resources. Although the risk that abalone fishing activities will detrimentally impact on historic heritage resources is low, the operation of the Abalone Fishery does present an opportunity to further

reduce risks in the long term by contributing to improved spatial data about the locations of shipwrecks.

A key constraint to the accurate assessment of risk is that details about the locations and condition of many shipwrecks are poor. Abalone divers may from time to time encounter shipwreck remains on the sea floor. When this occurs, fishers could report location (GPS coordinates, water depth) and any other information they detect about the structure to the NSW Heritage Office and DPI. This information will add to the data base, so that all fishers can be alerted about potential obstacles on the sea floor (with heritage and safety implications), and the Heritage Office will have more accurate information about the location of shipwrecks.

Implementation of routine reporting of potential shipwreck sites to the Heritage Office will contribute to the demonstration of due diligence (by showing that fishers are aware of potential risks and are taking steps to reduce them), as well as refining the available information.

A second appropriate management response is to provide licence holders with basic information about their responsibilities under the Heritage Act, including the provisions relating to damage to structures, exclusion zones and collection of any historic artefacts that may be observed.

Note that the Heritage Act requires notification of the Heritage Office if a relic is found (or suspected) and also requires that relics not be disturbed without obtaining a permit. In rare cases, this would mean that abalone fishing in the vicinity of a structure that has been reported to the Heritage Office should cease until the nature and significance of a relic has been investigated and confirmed.

APPENDIX 1

Indigenous Fisheries Strategy and Implementation Plan – December 2002

Appendix 1

Indigenous Fisheries Strategy and Implementation Plan - December 2002

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- Introduction
- The Structure of the Strategy
- Key Strategies
- Implementation Plan

Introduction

Fishing has been an integral part of the cultural and economic life of coastal and inland Aboriginal communities since they have been in this land. Fishing has been an important source of food, a basis for trade and an important part of cultural and ceremonial life.

Traditionally, Aboriginal fishers had responsibility for providing not just for themselves but for family and community. These cultural expectations continue in Aboriginal communities today. The strategy seeks to protect and enhance the traditional cultural fishing activities of Aboriginal communities, and ensure Aboriginal involvement in the stewardship of fisheries resources.

This strategy acknowledges the concerns and interests of other stakeholders in the fisheries of NSW, all of whom want to enjoy the resource, benefit from it, and ensure its long term sustainability.

An underlying theme in consultations about this strategy was the desire to preserve fisheries for the future. This is the point at which the interests of the Aboriginal communities and the broader Australian community intersect.

The Structure of the Strategy

There are some issues which can be addressed immediately by this strategy. Others will only be resolved after lengthy negotiation involving Aboriginal communities, the broader community, fishing groups and government agencies. The strategy will put in place a process which will ensure discussion and negotiation can continue with progressive resolution of problems and challenges.

The Indigenous Fisheries Strategy is based on four "key platforms" which the NSW Aboriginal Land Council has stated must be central to future NSW Fisheries planning.

- **Respect:** A philosophic and practical recognition of the traditional and cultural fishing heritage of Aboriginal people and communities, including their access to and use of the fisheries resource.
- **Engagement:** Involvement of Aboriginal communities with management and custodianship of resources in keeping with their traditional cultural roles.
- **Social and Economic Development:** Aboriginal people and communities having access to economic opportunities in established and emerging fishing industries.

- Employment: Aboriginal people and communities accessing employment and training opportunities in resource management and in the fishing and aquaculture industries.
Source: NSWALC submission to the Indigenous Fisheries Consultation, Aug 2002.

Over several years, NSW Fisheries' consultation has gathered the views of Aboriginal communities on the best approach to an Indigenous fisheries strategy. The consultation has also clarified the views of other interest groups such as conservationists, commercial fishers, recreational fishers and the broader community. The strategy seeks to ensure Aboriginal access for both cultural and economic activities, while acknowledging the broader community will have ongoing access to fisheries resources.

The NSW Indigenous Fisheries Strategy will:

- Encourage a broad community understanding of Indigenous traditional cultural fishing issues in NSW.
- Ensure that the importance of traditional cultural fishing is acknowledged in fisheries policy and practices, and during discussions on fisheries resource management issues.
- Encourage and support the involvement of Indigenous communities in the management of the state's fisheries resources.
- Encourage and support the involvement of Indigenous communities in commercial fishing, fishing based ecotourism, and the emerging aquaculture industry.

Key Strategies

In implementing the strategy 2002 - 2004 NSW Fisheries will:

- Create an Indigenous Fisheries Working Group with members from inland and coastal communities to advise NSW Fisheries on Indigenous issues and on how to consult with Aboriginal communities.
- Acknowledge and address Indigenous issues in preparing every fishery management strategy.
- Consult with Aboriginal communities when selecting marine parks, and on plans for their future management.
- Actively promote Indigenous involvement in aquaculture through community based workshops, by offering professional advice, and by helping to develop and deliver training programs.
- Support the ongoing exemption of traditional cultural fishing from the recreational fishing licensing scheme.
- Actively seek Indigenous community members who can speak for their people on fisheries advisory bodies, and maintain a register of people interested in taking part.
- Support the continued involvement of Indigenous commercial fishers in the industry.
- Negotiate, agree and maintain a system which allows ongoing access to the fisheries resource for Aboriginal people for traditional cultural activities.

- Support and promote the employment of Aboriginal staff in NSW Fisheries, within natural resource management generally, and in the aquaculture and commercial fishing industries.
- Support a coordinated Indigenous approach to natural resource management.

Each of these strategies will be advanced by NSW Fisheries with advice from the Indigenous Fisheries Working Group.

Specific initiatives:

Building Respect for Aboriginal Tradition and Culture:

- Employ an Indigenous Fisheries Strategy Project Manager to work with communities in NSW. The Project Manager will assist NSW Fisheries in identifying and acknowledging issues in fisheries management, in marine park planning and in Indigenous access to fisheries resources.
- Create an Indigenous Fisheries Working Group to consult with communities and advise NSW Fisheries on policy and management issues.
- Implement cultural awareness training and education programs for NSW Fisheries' staff, members of advisory committees and where possible other interest groups involved in the fisheries of NSW.
- Employ and retain Indigenous Fisheries Officers in regional locations, with an emphasis on having Indigenous community involvement in fisheries management issues and promoting community commitment to regulations.
- Provide Aboriginal access to fisheries for ceremonial occasions, and prepare proposals for government in cases where the Indigenous Fisheries Working Group advises changes may be appropriate.
- Identify compliance and management issues relevant to Indigenous people and through Indigenous Fisheries Working Group consider strategies to address these issues.

Engaging Aboriginal Communities in Fisheries Resource Management:

- Through the Indigenous Fisheries Working Group, identify local people who can contribute to fisheries and marine park planning and resource management on behalf of their communities.
- Negotiate with local communities on ways to achieve sustainable fisheries and where appropriate engage other agencies in joint strategies which contribute to sustainable resource management.

Social and Economic Development:

- Promote community access to aquaculture opportunities through workshops and through evaluation of aquaculture opportunities.
- Link communities to other government agencies which are able to plan and support commercial fishing and aquaculture ventures.

- Promote Indigenous involvement in shellfish aquaculture.
- Assist with feasibility studies to assess viability of identified value adding commercial opportunities associated with fishing e.g. fish processing.
- Assist with the development and promotion of Indigenous fishery based eco-tourism opportunities.
- Consult with the Indigenous Fisheries Working Group on strategies to maintain and support Aboriginal fishers in the commercial fishing industry.

Indigenous Employment Opportunities:

- Develop a strategy to create opportunities for Aboriginal employment in NSW Fisheries, including joint discussions to review opportunities with other natural resource management agencies.
- Work with NSW TAFE and other training organisations to encourage employment related training for Aboriginal people interested in working in aquaculture, natural resources management and commercial fishing.
- Review opportunities for Indigenous development of coastal aquaculture sites where communities have the capital to develop those sites or have ownership/access to land.
- Provide business development advice to communities and advise on the skills required to manage and develop commercial aquaculture ventures.

The plan has four key result areas:

Key Result Area 1: Building respect for Aboriginal tradition and culture.

Goal: To ensure the knowledge and views of Indigenous communities are understood, respected and considered in fishery and marine park planning.

Key Result Area 2: Engaging Aboriginal Communities in Fisheries Resource Management.

Goal: To involve Aboriginal communities in fishery and marine park management.

Key Result Area 3: Social and Economic Development.

Goal: To encourage Aboriginal community involvement in commercial opportunities associated with our fisheries resources.

Key Result Area 4: Indigenous Employment Opportunities.

Goal: To promote opportunities for Aboriginal employment and training in NSW Fisheries and in resource management, aquaculture and commercial fishing.

Implementation Plan

Key Result Area 1 – Building respect for Aboriginal tradition and culture

Goal: To ensure the knowledge and views of Indigenous communities are understood, respected and considered in fishery and marine park planning in NSW

Issues	Proposed Action	Immediate Priority Tasks (completed by June 2003)	Further Tasks (completed by June 2004)
Indigenous involvement in management	<p>Create a 2 year Project Manager position to support the Indigenous Fisheries Working Group (IFWG) and negotiate with Aboriginal communities</p> <p>Create an Indigenous Fisheries Officer position to work with indigenous communities and inside the Department to implement culturally appropriate fishery resource management and compliance processes</p>	<p>Officer employed by November 2002</p> <p>Officer employed by March 2003</p>	Evaluate impact of position's establishment
Local input to fishery management strategies	Develop and facilitate a model for community input to fishery management planning and progressive involvement in fishery management strategies	<p>Communities identify and document priorities</p> <p>Communities involved in development and implementation of fishery management strategies</p>	Model completed
Cultural awareness training	<p>Develop a training module for cultural awareness training for NSW Fisheries staff</p> <p>Organise for identified staff to complete module over 2 year period</p> <p>Offer cultural awareness seminars for advisory committees and promote cultural awareness more broadly</p>	<p>Module developed and 80 identified staff complete training</p> <p>One pilot training session</p>	<p>160 staff complete training</p> <p>Cultural awareness training included in NSW Fisheries induction process</p> <p>Cultural knowledge module developed, accredited and available</p> <p>Training available to all committees</p>
Access to fisheries for cultural and ceremonial reasons	Review current Indigenous cultural access to fisheries, review options with IFWG and prepare advice after reviewing input from communities	Initial report prepared by December 2003	

Key Result Area 2: Engaging Aboriginal Communities in Fisheries Resource Management

Goal: To involve Aboriginal communities in fishery and marine park management

Issues	Proposed Action	Immediate Priority Tasks (completed by June 2003)	Further Tasks (completed by June 2004)
Consultation and Negotiation	<p>Appoint Interim Indigenous Fisheries Working Group to advise on finalisation of strategy and future membership</p> <p>Appoint Indigenous Fisheries Working Group (IFWG) to advise on implementation of strategy</p>	IFWG constituted	
Community involvement in management	<p>With advice from IFWG identify people to represent communities</p> <p>Progressively identify key planning issues for communities</p> <p>Consult on Indigenous issues regarding fisheries management and marine park planning</p>	<p>Register established</p> <p>Each advisory body to report on issues as appropriate</p>	
Compliance	<p>Implement youth conferencing and warning scheme for young offenders</p> <p>Consult with IFWG on fisheries compliance after Indigenous Fisheries Officers in place</p>	<p>Develop and implement scheme in consultation with relevant Government agencies and IFWG</p> <p>Interim report complete</p>	<p>Report prepared with IFWG that includes operational proposals for the Director</p>

Key Result Area 3 - Social and Economic Development

Goal: To encourage Aboriginal community involvement in commercial opportunities associated with our fisheries resources.

Issues	Proposed action	Immediate priority tasks (completed by June 2003)	Further tasks (completed by June 2004)
Scoping workshops	Publicise and promote workshops to scope aquaculture opportunities in communities	Workshop approach agreed Workshops offered in interested communities	Ongoing
Evaluation studies	Fund appropriate feasibility studies in areas where communities are committed to aquaculture	Feasibility studies funded	Ongoing
Referral protocols agreed with regional development agencies	Develop protocols for involving specialist Aboriginal agencies or NSW economic development agencies in working with communities on aquaculture and other commercial ventures	Agreements in place	
Aquaculture hatchery	Identify and formalise community partnership model for an aquaculture hatchery on the coast	Proposal from NSW Fisheries discussed with IFWG Develop appropriate agreement with selected communities	
Training	Negotiate with TAFE and/or other training organisations to partner with Fisheries in delivering an aquaculture management program for Indigenous people	Program developed Training begins	Training available in three regional locations
Extension services	Implement business development and extension services for Indigenous people in aquaculture	Program developed	Review of program undertaken
Value adding initiatives	Consult Indigenous commercial fishers to identify value adding opportunities	Opportunities identified by December 2003	New programs progressed where opportunities identified

Issues	Proposed action	Immediate priority tasks (completed by June 2003)	Further tasks (completed by June 2004)
Indigenous commercial fishers	Project Manager to identify strategies to maintain levels of Indigenous involvement in commercial fishing.	Initial report prepared	Final report prepared for Director-General.

Key Result Area 4: Indigenous Employment Opportunities

Goal: To promote opportunities for Aboriginal employment and training in NSW Fisheries and in resource management, aquaculture and commercial fishing.

Issues	Proposed action	Immediate priority tasks (completed by June 2003)	Further tasks (completed by June 2004)
Employment strategy	Develop an employment strategy for NSW Fisheries in consultation with Indigenous Fisheries Working Group (IFWG), including consideration of part time employment	Report prepared	
Natural resource agency employment	Initiate/facilitate a workshop with natural resource agencies and Aboriginal representative agencies on a joint approach to employment in the sector		Report prepared and proposals with government for joint approach
Aquaculture sites	Develop a framework for Aboriginal communities to access and use land they own, for coastal aquaculture operations, including assisting with business plans and to locate capital.	Develop framework	
Skills identification	Review aquaculture and commercial fishing opportunities, consult with IFWG and prepare advice to communities on the skills required to sustain these businesses	Develop paper for IFWG	Long term training plan formulated by June 2004

APPENDIX 2

Background Information for IFS Working Group

Abalone Fishery Management in NSW

Indigenous Community Issues

How can the Abalone Fishery Management Strategy help address Indigenous community concerns about this commercial fishery?

The project involves the preparation of a Fishery Management Strategy for commercial harvesting of Abalone and an EIS to assess the environmental impacts of the proposed Fishery Management Strategy.

The Director-General of DIPNR issued requirements for the EIS. In relation to Indigenous community issues, the EIS must:

- Identify the interests of Indigenous people in the resources harvested by the fishery and in habitats that may be impacted by the fishery.

Indigenous interests encompasses “archaeology” – sites and places from the past, as well as the maintenance and transfer of traditional knowledge and culture and the well being of Indigenous people in modern coastal communities (resource access, rights, employment, community viability).

- Assess the potential changes in impacts on Indigenous interests and values of implementing the Draft FMS, when compared with the current situation. Identify whether the risk of impacts on Indigenous interests and values is likely to change (and the potential magnitude of this change) as a result of implementing the management responses in the Draft FMS.

The impact assessment must consider resource access and community well being as well as how the implementation of the Abalone FMS will interact with the implementation of the Indigenous Fisheries Strategy.

Current Situation

Abalone occurs on rocky reefs in relatively shallow waters along the NSW coast, and has been commercially harvested for 45 to 50 years. Abalone is commercially harvested by hand by divers. Access to the commercial fishery has been restricted since 1978 to help to maintain sustainable stocks. There are restrictions on the numbers of divers, some areas (such as marine reserves) are permanently closed to all abalone fishing, and there is a catch quota system which is reviewed annually. Most of the commercial catch now comes from south of Eden.

When access to the Abalone fishery was restricted, two of the permits were issued to Indigenous fishers on the south coast. These permits are no longer held by the Indigenous community. No Aboriginal people currently hold permits for commercial harvesting of Abalone.

Abalone is also collected by recreational fishers. NSW Fisheries regulations classify abalone fishing by Indigenous people as a recreational activity. Currently, recreational harvesting must only be done using snorkels (rather than scuba). Bag and size limits also apply.

In consultation about access to the species harvested by other commercial fisheries, Indigenous people have stated clearly that they believe that the fishing purposes, traditions and activities of Indigenous communities are different to those of recreational fishers. Indigenous fishing has cultural purposes and links to country that are not part of the justification for recreational fishing.

The IFS includes actions to improve consultation processes, to improve the awareness of commercial fishers and fisheries officers about Indigenous perspectives about country, and actions to enhance Indigenous participation in commercial fishing and the management of commercial fisheries generally.

The Indigenous issues assessment in the EIS will draw on reviews of studies about Indigenous fishing practices and traditional cultural knowledge about abalone fishing (and its place with other species in traditional fishing practices), as well as information from conversations with Indigenous fishers and other Indigenous community representatives about the role of fishing in community social, economic and cultural well being.

Management Responses considered in the Abalone Fishery Management Strategy

- The Abalone Fishery Code of Conduct
- Indigenous representation on ABMAC
- Communicating advice about sensitive places, industry awareness training – sharing information about culture, the resource and its limitations
- Protection of culturally important sites, places and practices
- Skill development and employment opportunities for Indigenous people to support participation in existing management systems.

Key Questions to help understand Indigenous concerns and to guide the management of the fishery

What is the traditional and contemporary value of abalone to Indigenous people? Are there special obligations about the sharing of abalone with elders and others in the community, or is it part of a general obligation to and respect for family and elders?

Are there places where Abalone grow or are commercially harvested that have special cultural value to local Aboriginal people, in terms of stories, archaeological sites, totem values or community history? If so, how should Abalone harvesting be managed in these areas?

How does the current management of the Abalone fishery affect Indigenous access to abalone resources? Does the operation of the commercial fishery show respect for Indigenous fishing culture and heritage?

How can current concerns about access be reduced? Do recreational licence exemptions assist people to meet cultural obligations without breaking the law? Do special permits for cultural events help with bag limit issues?

What are the main outcomes for Aboriginal people that you would like to see achieved by the commercial Abalone Fishery Management Strategy?

How can the participation of Indigenous people in the management of the fishery (eg by being part of ABMAC) be improved?

The Abalone Fishery Code of Conduct

A voluntary Code of Conduct is being prepared for the commercial abalone fishery in NSW. Several of the objectives and principles of the proposed Code are relevant to the appropriate management of interactions between Indigenous community values and the commercial fishery.

The Code seeks to promote ecologically sustainable development of the abalone industry (aquatic resources and their environments), and to formalise sound management practices that take into account economic, social, environmental, technical and biological factors. Interactions with Indigenous fishers and places of value to the Indigenous community are considered as a social factor influencing the reputation of the abalone industry for best practice sustainability management. Relevant components of the Code include:

Ecological sustainability and threatened species

- Support actions to encourage the conservation of essential fish habitats and the rehabilitation of fish populations and habitats.
- Minimise the impact on natural resources and habitat by imposing and adhering to size limits, closed areas or closed seasons as appropriate.
- Be aware of and abide by NPWS regulations relating to boating operations in the vicinity of marine mammals, and participate in a reporting program for identifying areas where threatened species occur.

Fishery compliance

- Report observations of illegal fishing to NSW Fisheries.

Indigenous sites

- Be aware of known locations of items and sites of significance to Indigenous people and become aware of newly discovered locations as this information becomes available;
- Harvest around the location of items and sites of significance to Indigenous people in an appropriate manner that respects the value of the items and sites to Indigenous people.

Are there other Indigenous interests that should be addressed in the commercial fishers Code of Conduct? What would need to happen?

APPENDIX 3

Media Articles



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Hunters take a stand against fishing law

James Woodford

To NSW Fisheries, Aboriginal man Andrew Nye and his extended family are poachers, thieves of a precious shellfish that has become one of the most sought-after seafoods on earth.

Nye, however, bristles at the charge. "We are not poachers. We are hunter-gatherer men."

He admits to being in possession of 206 more abalone than he was legally allowed to catch, that against the rules they were shucked by the sea and that many were undersized. But Nye says he has done nothing wrong and today he will be one of 11 defendants in a case that all sides expect will eventually reach the highest court in the land.

In a tiny courtroom at Narooma, Sydney-based barrister Bruce Levet, briefed by the Legal Aid Commission, will tell the magistrate's court that his client admits to the facts of the NSW Fisheries' allegations.

There are 11 defendants in all: Nye, two of his sons, his nephew, his brother-in-law and at least six other members of his extended family. They face 21 separate prosecutions, including possession of prohibited size abalone and eastern rock lobsters,

exceeding bag limits for both species, shucking too close to the water and giving false information to fisheries officers.

The offences each carry up to a \$10,000 fine and/or up to three months imprisonment.

Mit Levet is expected to assert that the men are engaged in cultural activities and that Aboriginality amounts to a religion, so stopping their hunter-gathering is arguably an attack on their religious freedom.

Each of the men is being prosecuted individually but their defence will be identical, which is why all the defendants are being tried together. No matter what the outcome, whoever loses will almost certainly appeal, leaving a higher court to answer the question: is there a traditional cultural right to harvest seafoods that other Australians are forbidden from over-catching?

Andrew Nye's sons Craig and Troy were caught with 175 abalone above the limit, but say they were doing nothing wrong.

"Our parents and their parents before them did this," Andrew Nye said. "This is what we have always done."

In the sea, Nye said, he was a

gatherer and a hunter on land:

"They gave us the name poachers."

South Coast Aboriginal families say that they see abalone as an important food source which they call "muttonfish".

Nye's nephew, Joey Carriage, is also likely to be joining next week's case after he was caught with 685 abalone and eight eastern rock lobsters. He has already spent time in jail for previous abalone offences.

Carriage says it is crucial to them to clean the shellfish by the water as that is the way it has always been done. He says he was taught that waste flesh and the shells should always be thrown back into the sea, yet to do so is to break the law.

NSW Fisheries declined to comment on the case but said it had an indigenous fisheries strategy that provided for special permits allowing bag limits to be broken for the purposes of special ceremonies and traditional cultural events. Last year five such permits were issued. Also there were exemptions for Aboriginal people from recreational fishing licences when they were in their own land council area.



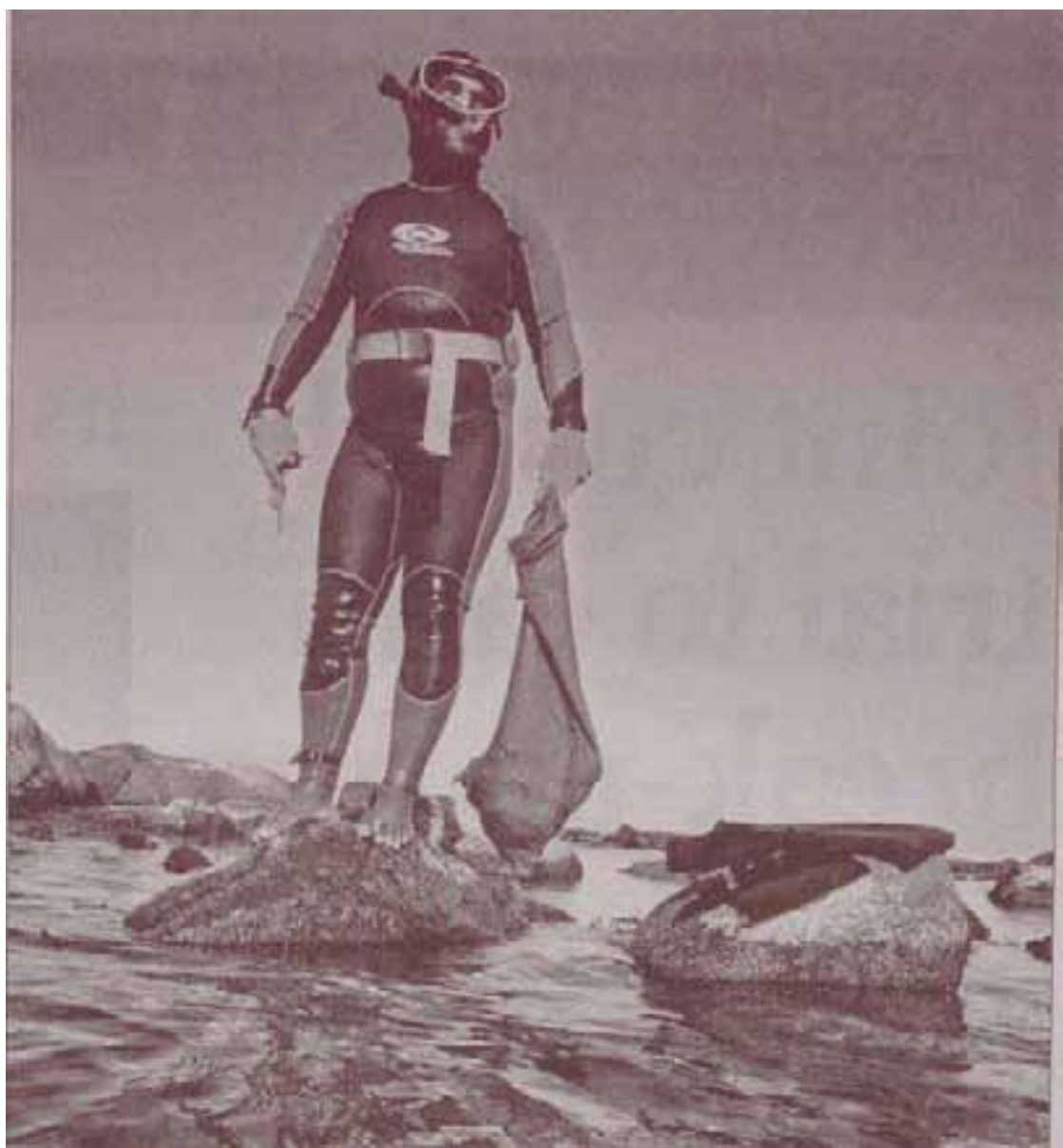


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Test case ...
Joey Carriaga
and his
relations are
fighting for
their right to
fish for abalone
and rock
lobsters on the
South Coast.
Photo
Andrew Taylor



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Koori fishermen to argue abalone, lobster charges

Spiritual and religious beliefs reasons why limits exceeded

By LAURELLE PAGET

A LANDMARK court case resumes today in Narooma where a group of Aboriginal men will claim their spirituality and religious practices are justification for harvesting more seafood than is legally allowed.

Eleven men from the same extended Far South Coast family have been called to appear in the Local Court before Magistrate Paul Lyon on various charges relating to offences and regulations under the NSW Fisheries Management Act.

They are Jeremy Caple, Scott Rigby, Troy Nye, Craig Nye, Kevin Mason, Peter Moore, Andrew Nye, Cecil Leon, Joe Carriage, Brian Nye and Keith Nye.

Some have been charged with

possessing more and undersized abalone than are legally allowed under the act, and some with having more eastern rock lobsters than allowed.

Each offence carries fines of up to \$10,000, three months' imprisonment, or both.

Ten have admitted guilt but their Sydney based barrister, Bruce Levett, will argue they were practising their religion and cultural traditions when harvesting the seafood. The 11th man has yet to enter a plea.

All defendants called to the witness box so far maintain they caught more than the limits to provide for the elders and their wider community. Some are also

charged with shucking or cleaning abalone beside the water which, while an offence under the act, the men claim is traditional practice.

Proceedings have been delayed several times for legal discussions over what constitutes admissible evidence and what is hearsay - where Aboriginal spiritual beliefs are handed down by oral tradition - together with concerns over who would be "expert" witnesses on Aboriginal culture and religion.

The court has also called for the defendants' genealogical records.

Legal Aid solicitor Virginia Falk is also the first Aboriginal lawyer in Australia to be involved in such proceedings. The case is scheduled to conclude on Friday.



Eleven men from the same extended Far South Coast family have been called to appear in the Local Court before Magistrate Paul Lyon on various charges relating to offences and regulations under the NSW Fisheries Management Act.

APPENDIX 4

Shipwrecks recorded in the Modern Archaeological Record in the Regions studied

Shipwrecks recorded in the Marine Archaeological Record in the Regions Studied

The following database includes shipwrecks from Illawarra and South Coast only, as Abalone diving occurs almost exclusively south of Wollongong. The database hereunder has been prepared from source(s) that sometimes provide incomplete information. The database seeks to indicate sites that lie within the Abalone Fishery however specification of the location of some wrecks has required subjective judgment of the site of the event based on evidence of the activities of a vessel at the time of loss, the nature of its voyage and on the nature of rescue and reporting of the loss. Where shown below, "HSA, Federal" in the Protection column indicates a wreck subject to the Historic Shipwrecks Act 1976, Commonwealth legislation: "NSW HA, State" indicates a wreck subject to the (NSW) Heritage Act 1977.

Region	Vessel: Type	Date Lost	Location	How Lost	Detail	Protection
Illawarra	Agnes: Wood Carvel Ketch	_/_/1883	Off Jervis Bay	Foundered?	38 tons, 22.95x4.328m, Built 1877 Williams River, Voyage/cargo unknown	HSA*, Federal~
Illawarra	Annie Powell: Wood Carvel Schooner	5/8/1886	About 5-6 miles off Five Islands, Wollongong	Sprang leak, foundered	122 tons, 30.48x7.437m, Built 1884 Macleay River, Voyage Kiama-Botany Bay	HSA, Federal
Illawarra	Botany: Dredge	9/10/1936	Off Jervis Bay	Foundered under tow	Voyage Newcastle-Bermagui	Not protected
Illawarra	Buonaparte: Wooden Schooner	17/10/1864	8 miles north of Bellambi, 10 miles offshore	Sprang leak, foundered	119 tons, 25.2x6.7m, Voyage Bellambi-Invercargill, cargo 100 tons coal	HSA, Federal
Illawarra	Christopher George: Wooden Schooner	_/_/1869	Off or near Wollongong	Foundered in gale	57 tons, 18.9x4.8m, Built 1849 Macleay River, Voyage Sydney-Wollongong, Cargo unknown, 5 lost	HSA, Federal
Illawarra	Clio: Wood Carvel Ketch	12/2/1869	Off Wollongong	Foundered?	42 tons, 19.14x5.516m, Built 1868 Port Stephens, voyage/cargo unknown	HSA, Federal
Illawarra	Coast Farmer: Iron Steamer, Screw	20/07/1942	Off Jervis Bay	Torpedoed	3290 tons gross, 98.75x14.08m, Built 1920 Newark USA, 1 lost	Not protected
Illawarra	Colac, HMAS: Steel Steamer, Screw	17/02/1987	Off Jervis Bay	Scuttled after use as gunnery target by HMAS Ovens	Built 1941, Morts Dock	Not protected
Illawarra	Comboyne: Wooden, Steamer, Screw	27/11/1920	1 mile off Bass Point	Struck object	Timber carrier, 281 tons, 42.42x9.052m, built 1911 at Tuncurry NSW	HSA, Federal
Illawarra	Corio: Iron, Steamer, Screw	12/7/1866	Off Wollongong	Wrecked in gale	170 tons, 39.8x5.5m, built 1854 Greenock Scotland, voyage unknown, 10 lost	HSA, Federal
Illawarra	Dandenong: Iron Steamer, Screw	_/_/1876?	Off Jervis Bay	Sprang leak, foundered during the 'Dandenong' gale	743 tons, 61.3x8.6m, built 1865 Howden Northumberland, Voyage with passengers Hobsons Bay -Sydney, 40 lost	HSA, Federal
Illawarra	Duke of Wellington: Wooden Brigantine	14 June 1863	Off Bellambi	Capsized while standing off Bellambi in a storm, in ballast	88 tons, 21.5x6.2m, Build unknown but former Brazil trade slaver, Voyage to Bellambi in ballast, 5 lost	HSA, Federal
Illawarra	Echo: Wood Carvel Schooner	21/3/1863	Near Long Point, Shellharbour	Struck rock	21 tons, 11.3x3.444m, built Sydney 1843. In Voyage Shoalhaven-Sydney: cargo wheat, maize, potatoes	HSA, Federal
Illawarra	Elizabeth: Wooden Schooner	_/_/1868	Off Bulli	Capsized in squall	46 tons, 21.0x5.1m, built 1862 Doughboy Creek, Qld,	HSA, Federal
Illawarra	Esther Maria: Wooden Ketch	29/2/1882	6 miles north of Beecroft Point	Collision with 'Kameruka	52 tons, 21.2x5.7, Built 1867 Hawkesbury River, Voyage Sydney-Jervis Bay, 1 lost	HSA, Federal
Illawarra	Fairey Firefly: naval aircraft	Not advised	Not advised	Not advised	Not advised	
Illawarra	Franz: Wooden Schooner	9/9/1879	Off Shellharbour, north of Lake Illawarra, near Five Islands	Foundered in gale	148 tons gross, 25.2x6.5m, Built Hamburg Germany, Voyage Sydney-Kiama in ballast	HSA, Federal
Illawarra	Free Selector: Wooden Ketch	13/2/1869	Off Wollongong	Foundered	47 tons, 18.9x5.56, Built 1867 Brisbane Water, Voyage/Cargo unknown	HSA, Federal
Illawarra	Frolic: Wooden Ketch	nk	Kiama	Wrecked	26 tons, 13.9x4.24m, Built 1853 Brisbane Water, Voyage/cargo unknown	HSA, Federal
Illawarra	Gabriella: Steel Motor Vessel	10/12/1986	Dutch heavy lift vessel, capsized and sank at mooring Port Kembla 14/8/1986, 2 lost. Vessel refloated upside down, declared total loss, towed out to sea 30 miles off Port Kembla and...	...Scuttled	Built 1974 Netherlands,	Not protected
Illawarra	George: Wood carvel Schooner	_/_/1867	Off? Bulli	Wrecked	98 tons, 21.39x5.76m, Built 1846 Sunderland UK	HSA, Federal
Illawarra	George s [or M] Livanos: Steel Steamer, Screw	20/7/1942	15 miles off Jervis Bay,	Torpedoed	4835 tons, 134.4x17.58m, Built 1938 Hartlepool UK, Voyage/cargo unknown	Not protected
Illawarra	Henrietta: Wooden Schooner	4/2/1880	Crookhaven Reef, off Shoalhaven Head	Foundered	29 tons, 18.3x 4.6m, Built 1871 Brisbane Water, Voyage Sydney-Shoalhaven in ballast	HSA, Federal
Illawarra	Julie Heyn: Wood Carvel Barque	_/_/1865	Off Cape St George, Jervis Bay	Sprang leak, foundered	318 tons, 33.92x7.99m, Built 1848 Stettin? New Britain?Pomerania Germany, Voyage to Adelaide with coal	HSA, Federal
Illawarra	Koraaga: Steel Steamer, Screw	9/09/1931	5 miles east of Black Head, Gerringong	Struck reef	221 tons, 34.93x6.644m, Built 1915 Middlesborough UK, Fishing out of Sydney	Not protected


Shipwrecks recorded in the Marine Archaeological Record in the Regions Studied

The following database includes shipwrecks from Illawarra and South Coast only, as Abalone diving occurs almost exclusively south of Wollongong. The database hereunder has been prepared from source(s) that sometimes provide incomplete information. The database seeks to indicate sites that lie within the Abalone Fishery however specification of the location of some wrecks has required subjective judgment of the site of the event based on evidence of the activities of a vessel at the time of loss, the nature of its voyage and on the nature of rescue and reporting of the loss. Where shown below, "HSA, Federal" in the Protection column indicates a wreck subject to the Historic Shipwrecks Act 1976, Commonwealth legislation: "NSW HA, State" indicates a wreck subject to the (NSW) Heritage Act 1977.

Region	Vessel: Type	Date Lost	Location	How Lost	Detail	Protection
Illawarra	Lady of the Lake: Wooden Schooner	31/7/1879	7 miles offshore, Shoalhaven Bight	Wrecked	41 tons, 16.45x4.876m, Built unknown, Voyage unknown, in ballast	HSA, Federal
Illawarra	Little Pet: Wood Carvel Schooner	13/6/1885	Bellambi Reef, Wollongong	Struck reef	78 tons, 20.02x5.608m, Built 1851 North Shields UK, Voyage/cargo unknown	HSA, Federal
Illawarra	Lucy: Wooden Schooner	_/7/1847	Off Wollongong	Foundered	47 tons, 14.93x 4.785m, Built 1845 Ulladulla, Voyage Sydney-Port Phillip with wheat, timber	HSA, Federal
Illawarra	Maggie Scott: Wood Carvel Ketch	14/6/1889	Off Black Point, Shoalhaven Bight	Sprang leak, foundered30 tons, 18.1x	30 tons, 18.1x5.09m, Built 1868 Brisbane Water, Voyage Tomkin Creek-Sydney with sawn hardwood	HSA, Federal
Illawarra	Malcolm: Wood carvel Brigantine	_/2/1898	In the vicinity of Bulli	Foundered in gale	182 tons, 32.06x7.162m, Built 1862 Prince Edward Island Canada, Voyage Wollongong-Sydney with coal, 7 lost	HSA, Federal
Illawarra	Margaret: Wooden clinker Ketch	28/12/1879	Off Black Point, near Gerringong	Lost rudder, foundered	25 tons, 15.84x3.931, Built 1867 Durham UK, Voyage Shoalhaven-Sydney with timber	HSA, Federal
Illawarra	Marvel: Wood Carvel Steamer Screw	24/11/1892	4 miles off Pilot Station, Shoalhaven Bight	Sprang leak, foundered	71 tons, 22.98x5.547m Built 1891 Jervis Bay, Voyage Jervis Bay-Sydney with timber logs	HSA, Federal
Illawarra	Mary Warner: Wood Carvel Top-sail Schooner	20/4/1894	Off Kiola	Sprang leak, abandoned	65 tons, 23.65x6.4m, Built 1873 Lake Macquarie, Voyage Beagle Bay-Sydney with timber	HSA, Federal
Illawarra	Unnamed steel launch	15/06/1939	Off Shellharbour	Caught fire	Details unknown, reported by fishermen	Not protected
Illawarra	Norman: Wood Carvel Schooner	28/8/1895	Bellambi Reef, Wollongong	Struck reef	51 tons, 20.6x6.3, Built 1880 Lake Macquarie, Voyage Wollongong-Sydney with 81 tons of coal	HSA, Federal
Illawarra	North Briton: Wooden Sloop	17/12/1828	Off Wollongong	Wrecked	Details, voyage and cargo unknown	HSA, Federal
Illawarra	Northern Firth: Steel Steamer, Screw	22/02/1932	Off Brush Island, Ulladulla	Struck submerged object	1954 tons, 85.4x12.77m, Built 1922 Grangemouth UK, Voyage Melbourne-Sydney with general cargo	Not protected
Illawarra	Palmerston: Iron Steamer, Screw	29/05/1929	18 miles south of Jervis Bay	Collision	463 tons, 53.43x7.62m, Built 1878 Glasgow UK, Voyage unknown, cargo fish	Not protected
Illawarra	Perseverance: Wooden, Type unknown	_/1/1842	Illawarra region	Cause not known	Details not known	HSA, Federal
Illawarra	Petrel: Wooden Schooner	_/1/1850	Between Wollongong-Sydney	Cause not known	7 tons, 8.11x2.74, Built 1838 Sydney, Voyage Wollongong-Sydney, Cargo unknown	HSA, Federal
Illawarra	Phoebe: Barquentine	_/5/1876?	Offshore north of Jervis Bay?	Sprang leak?	Details unknown, said to be transit Hong Kong-Newcastle, Cargo unknown - information derived from message in bottle	HSA, Federal
Illawarra	Prince Alfred: Wooden clinker Ketch	_/6/1891	Off Five Islands, Wollongong	Supposedly foundered	56 tons, 22.82x5.577m, Built 1868 Balmain, Voyage Sydney-Mosquito Bay in ballast	HSA, Federal
Illawarra	Resolute: Wooden Steamer, Screw	12/07/1907	1 mile offshore, Bellambi Reef, Wollongong	Struck sand/reef	211 tons, 39.92x7.101m, Built Auckland, Voyage Sydney-Kiama in ballast1880	HSA, Federal
Illawarra	Result: Wood Carvel Schooner	30/9/1893	Near Abrahams Bosom, Shoalhaven Bight	Missed stays	56 tons, 25.23x5.699, Built 1882 Wangaroa NZ, Voyage Sydney-St Georges Basin in ballast	HSA, Federal
Illawarra	Ruby: Wood Carvel Fishing boat	9/12/1895	Sir John Young Banks off Beecroft Head	Sprang leak	8 tons, 9.174x2.164, Built 1872 Balmain, Voyage Sydney-Beecroft Head with fish	HSA, Federal
Illawarra	Saxonia: Iron Steamer, Screw	17/5/1898	Bellambi Reef, off Wollongong	Struck reef (navigation error), in 'Maitland' gale	257 tons gross, 49.49x7.406m, Built 1856 Hull UK, Voyage Wollongong-Bulli with coal	HSA, Federal
Illawarra	Spec: Wood Carvel Schooner	17/10/1865	1.5 miles off Black Head near Gerringong	Heeled over, foundered in squall	17 tons, 13.13,x3.535m, Built 1856 Sydney, Voyage/cargo unknown, 2 lost	HSA, Federal
Illawarra	Spray: Wood Carvel Brig	24/4/1870	Near the Bulli jetty at Coal Cliff	Cause not known	142 tons, 23.89x6.522m, Built 1850 Launceston, Wollongong, Cargo unknown	HSA, Federal
Illawarra	Taramung: Iron Steamer, Screw	_/5 or 6/1891	In or near Wreck Bay	Foundered in gale	1281 tons gross, 75.07x10.24m, Built 1880 Port Glasgow UK, Voyage Newcastle-Melbourne with 1647 tons coal, 30 lost	HSA, Federal
Illawarra	Tiger: Wood Carvel Schooner	11/7/1866			76 tons, 18.1x5.303m, Built 1821 Barrington Nova Scotia, Voyage to Wollongong, cargo unknown, 3 lost	HSA, Federal
Illawarra	Unidentified wreck	nd	Approximately 5 miles off Shellharbour	Unknown	Details unknown; wooden wreckage reported by fishermen - nd	Not protected



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Region	Vessel: Type	Date Lost	Location	How Lost	Detail	Protection
Illawarra	Unique: Wooden Steamer, Screw	4/03/1934	Off Shoalhaven Heads	Sprang leak	84 tons, 23.1x5.547m, Built 1902 Blackwall Brisbane, Voyage Sydney-Port Kembla with fish,	Not protected
Illawarra	Wandra: Wooden Steamer, Screw	15/12/1915	Off Drum & Drumsticks, Jervis Bay [found at Lat35.044833-Long 50.839, in 26 m water]. Deck winch pictured below (Source: Maritime Heritage Online, NSW Heritage Office)...	Swamped by heavy seas	164 tons gross, 36.72x7.924m, Built 1907 Coopers Creek, Voyage Moruya-Sydney with full cargo	HSA, Federal
						
Illawarra	William Combe: Wooden Steamer, Screw	16/04/1931	Off Drum & Drumsticks, Jervis Bay	Hit rock, foundered	39 tons, 18.28x6.035m, Built 1929 Drummoyne, Voyage unknown, Cargo fish,	Not protected
South-east	Alice Jane: Wood Carvel Schooner	11/1/1888	Off Tomakin, Batemans Bay	Unknown	80 tons, 25.2x5.73m, Built 1873 Cape Hawke, Voyage unknown, Cargo timber	HSA, Federal
South-east	Almeda: Wooden Brigantine	9/7/1863	7 miles NE Cape Howe	Sprang leak, foundered	210 tons, 28.9x7.3m, Built Connecticut USA, Voyage Sydney-Melbourne with maize/general cargo	HSA, Federal
South-east	Ann and Maria: Wooden Brig	5/7/1869	9-10 miles south Green Cape	Unknown	236 tons, 28.3x8.0m, Built 1849 Sunderland UK, Voyage Newcastle-Melbourne, Cargo unknown	HSA, Federal
South-east	Arthur: Wooden Ketch	_/_/1883	Off Wagonga Head, Narooma	Unknown	61 tons, 23.4x5.7m, Built 1879 Manning River, Voyage/cargo unknown,	Not protected
South-east	Bega: Iron Steamer, Twin-screw	5/04/1908	Off Tanja Beach, between Tathra and Bermagui	Capsized	567 tons gross, 57.7x7.5m, Built 1883 Greenock UK, Voyage Tathra-Sydney with passengers and cargo, 1 lost (heart attack during rescue)	HSA, Federal
South-east	Carrick: Iron Barque	16/12/1896	Off Cape Howe	Unknown	998 tons nett, other details unknown, Voyage Newcastle-Valparaiso with coal,	HSA, Federal
South-east	Conjola: Wooden Steamer, Paddle	22/7/1927	Batemans Bay-Sussex Inlet	Foundered	35 tons, 18.28x6.096m, Built 1920 Balmain, Voyage/cargo unknown	Not protected
South-east	Cumberland: Steel Steamer, Screw	11/08/1917	5 miles SE Green Cape	Sank under tow after struck mine or torpedoed	8993 tons gross, 144.4x18.28m, Built 1915 Glasgow UK, Voyage Townsville-Eden with frozen meat	HSA, Federal
South-east	Dunkeld: Wood Carvel Barquentine	27/6/1870	Off Twofold Bay	Lost at sea	390 tons, 40.14x5.974m, Built 1852 Nova Scotia Canada, Voyage Newcastle-Melbourne with coal, 2+ lost	HSA, Federal
South-east	Favorite: Wooden Ketch	17/5/1852	Cape Howe area, could be in Victorian waters	Unknown	15 tons, 13.1xm, Built Brisbane Water, Voyage Melbourne-Sydney with 2000 oz gold dust and 8+ passengers, 8+ lost	HSA, Federal
South-east	Glimpse: Wooden Barque	20/10/1881	240 miles off Cape Howe	Bows opened in gale	347 tons gross, 40.08x9.2m, Built 1856 Newbury NY USA, Voyage Burrards Islet BC-Melbourne with timber, 3 lost	HSA, Federal


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Region	Vessel: Type	Date Lost	Location	How Lost	Detail	Protection
South-east	Henry Bolte: Steel Motor Vessel, Tug	_/8/1988	South Red Point off Twofold Bay [located at Lat37.114 Long 149.962333in 25m water. Gangway on Henry Bolte depicted below (Source: Maritime Heritage Online, NSW Heritage Office): 	Scuttled as dive site	393 tons gross, 40.72x10.21m, Built 1966 Newcastle,	Not protected
South-east	Indus: Wooden Barque	17/3/1872	100 miles off Mt Dromedary	Lost at sea	368 tons, 33.1x8.49m, Built 1839 Dumbarton UK, Voyage unknown, with coal	HSA, Federal
South-east	Industry: Wooden clinker Sloop	_/6/1845	Off Broulee	Unknown	14 tons, 9.144x3.505m, Built 1834 Hawkesbury River, Voyage/cargo unknown	HSA, Federal
South-east	Iron Knight: Steel Steamer, Screw	8/02/1943	30 kms off Montague Island	Torpedoed	4812 tons gross, 123.2x17.12m, Voyage Whyalla-Newcastle with iron ore, Built 1937 Glasgow UK, 36 lost	Not protected
South-east	Julius Vogel: Wood Carvel Schooner	16/4/1890	Off Tomakin, Batemans Bay	Foundered in gale	56 tons, 20.23x5.882m, Built 1873 Auckland, Voyage/cargo unknown	HSA, Federal
South-east	Kali: Wooden Motor Vessel	_/9/1986	12 miles South Bermagui	Unknown	42.5 tons, 16.46x5.03m, Built 1958 Ulladulla	Not protected
South-east	Kameruka: Steel Steamer, Screw	16/10/1897	Pedro Reef, Moruya [cf former collision with 'Esther Marie' 1882 above]	Unknown	515 tons gross, 54.74x7.467m, Built 1880 Greenock UK, Voyage Twofold Bay-Sydney with passengers and cargo	HSA, Federal
South-east	Kedumba: Wooden Steamer, Screw [Vehicular Ferry]	21/12/1932	25 miles NW Montague Island	Sprang leak, foundered	291 tons, 40.08x11.06m, Built 1913 Sydney, Voyage Sydney-Melbourne in ballast	Not protected
South-east	Lady Darling: Iron Steamer, Screw	_/11/1880	Approximately 4 miles SW Montague Island, in 15 fathoms. Located Lat36.318333 Long150.168333. View of stem to Engine Room below (Source: Maritime Heritage Online, NSW Heritage Office): 	Struck submerged object in gale	895 tons gross, 73.03x8.564m, Built Liverpool UK, Voyage Newcastle-Melbourne with coal	HSA, Federal
South-east	Lillian: Wooden Ketch	20/6/1882	Grasshopper Island, Batemans Bay	Unknown	33 tons, 18.71x5.059m, Built 1865 Balmain, Voyage to Newcastle, Cargo unknown	HSA, Federal

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Region	Vessel: Type	Date Lost	Location	How Lost	Detail	Protection
South-east	Malaita: Motor Vessel	28/05/1948	Off Narooma	Unknown	Details unknown	Not protected
South-east	Mary: Wooden Schooner	26/5/1821	Twofold Bay, Range Lat37.101-37.034333, Lon149.950667-149.850667	Anchor cables parted	Details unknown, Voyage Sydney-Port Dalrymple with spirits	HSA, Federal
South-east	Mimmie Dyke: Wood Carvel Schooner	16/7/1887	South of Twofold Bay	Unknown	87 tons, 23.77x5.76m, Built 1854 Dundee UK, Voyage Melbourne-Sydney, Cargo unknown	HSA, Federal
South-east	Mimosa: Iron Steamer, Paddle	9/9/1863	Off Bulga Head, north of Tathra. Located Lat 36.58295 Long150.05755. View of the Mimosa's boiler below (Source: Maritime Heritage Online, NSW Heritage Office): 	Struck submerged rock	153 tons gross, 49.65x5.455m, Built 1854 Renfrew UK, Voyage Merimbula-Sydney with passengers and coastal cargo, 2 lost	HSA, Federal
South-east	Mina, Wood Carvel Brig	23/6/1888	East of Green Cape	Sprang leak, foundered	265 tons, 32.88x7.65m, Built 1867 Rounbeck Germany, Voyage Clarence River-Melbourne with sawn hardwood	HSA, Federal
South-east	Motor Gem: Wooden Motor Vessel	15/03/1917	Off Tathra Head	Unknown	57 tons gross, 24.78x5.425m, Built 1907 Sydney, Voyage/cargo unknown,	HSA, Federal
South-east	Olivia: Wooden Schooner	19/11/1827	South of Twofold Bay	Unknown	60 tons, other details unknown, Built 1826 Port Dalrymple, Voyage/cargo unknown	HSA, Federal
South-east	Picard: Wood carvel Schooner	8/10/1867	15 miles East of Cape Dromedary	Lost Stern post	165 tons, 27.92x6.86m, Built 1846 Portsmouth New Hampshire USA, Voyage Launceston -unknown, Cargo unknown	HSA, Federal
South-east	Porpoise: Wooden Schooner	16/5/1866	Off Wagonga Heads, Narooma	Unknown	39 tons, 14.11x4.54m, Built 1851 Shoalhaven, Voyage/cargo unknown,	HSA, Federal
South-east	Provincial Trader: Steel Motor Vessel	24/03/1995	Off Twofold Bay	Scuttled after sinking at moorings	419 tons, 42.367xm Built 1959 Brisbane as a fire-fighting tug, converted to fishery9.957, Voyage from Twofold Bay	Not protected
South-east	Recina: Steel Steamer, Screw	11/04/1943	32 km North of Cape Howe	Unknown	4732 tons gross, 122.1x16.52m, Built 1930 Sunderland UK as 'Lady Plymouth', Voyage Whyalla-Newcastle with iron ore	Not protected
South-east	Riptide: Wooden Motor Vessel	5/06/1949	Near Tathra	Unknown	26 tons, 14.52xm, Built 1948 Gladesville, Voyage/cargo unknown	Not protected
South-east	Robert J Walker: Steel Steamer, Screw	26/12/1944	East of Bermagui	Torpedoed	7180 tons, 128.8x17.37m, Built 1943 Portland Oregon USA, Voyage Fremantle-Sydney, Cargo unknown	Not protected
South-east	Tasman Hauler: Steel Motor Vessel	1/10/1988	Off Twofold Bay, Located Lat36.112 Long149.962	Scuttled as dive site after running aground	418 tons, 42.4x9.96m, Built 1959 Brisbane as firefighting tug 'BP Cockburn', Voyage from Twofold Bay, No cargo	Not protected
South-east	Tea Tephi: Wooden Schooner	27/8/1894	Off Twofold Bay	Collided with whale	23 tons, 14.99x3.474m, Built 1884 Eden, Voyage/cargo unknown	HSA, Federal
South-east	Teazer: Wooden carvel Brigantine	11/10/1854	Off Twofold Bay	Abandoned in gale	58 tons, 14.99x4.572m, Built Melbourne, Voyage Launceston-Melbourne in ballast	HSA, Federal
South-east	Victory: Wood Carvel Brigantine	6/11/1893	Near Cape Howe	Abandoned after sprang leak	142 tons, 27.79x7.376m, Built 1873 Jervis Bay, Voyage Warrnambool-Newcastle in ballast	HSA, Federal
South-east	Wear: Steel Steamer, Screw	8/09/1944	15 kms off Montague Island	Collision	1892 tons, 81.68x11.55m, Built 1911 Sunderland UK, Voyage/cargo unknown, 1 lost	Not protected

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South-east	William Dawes: Steel Steamer, Screw	22/07/1942	Off Tathra Head	Torpedoed	7176 tons, 126.97x17.343m, Built 1942 Portland Oregon USA, Voyage/cargo unknown, 5 lost	Not protected
South-east	Zvir: Steel Steamer, Screw	15/11/1942	150 kms South of Port Kembla	Collision	5607 tons, 118.9x16.45m, Built 1926 Glasgow UK, Voyage Whyalla-Newcastle with iron ore	Not protected

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