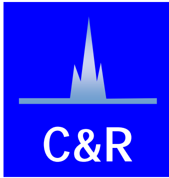

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Groundwater and Environmental Specialists
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Spatial Analysis
GIS Services

PO Box 1777
Thuringowa Qld, 4817, AUSTRALIA

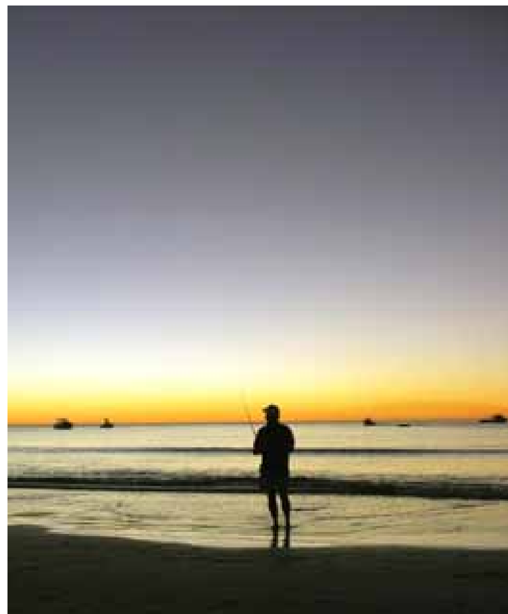
Tel: +61 (0) 7 4725 3751
Mob: +61 (0) 417 635 032

info@candrconsulting.com.au
www.candrconsulting.com.au

FINAL REPORT
05 September 2007

AS FAR AS THE EYE CAN SEE:

Indigenous Interests in the East Marine Planning Region



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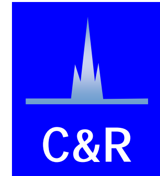

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[1] C&R Consulting, [2] TYTO Consulting Townsville

A gentle reminder from the owners of the land

‘For thousands and thousands of years, Koories have lived and hunted around Beecroft Peninsula and Wreck Bay, and down in the valley submerged by the ocean that is now called Jervis Bay. For all those years we cared for the land and its sites, for it is Koorie belief that the land falls into ruin if the sites are not properly cared for.

Now we have put in a claim on our traditional land on Beecroft Peninsula. Gubbas – even our friends – come and ask us what we will do with the land when it is ours once again.

That is a Gubba question! Land is not something to be used or something that you do things to. Sometimes it is special land and it is enough to be part of it, to be one with it.

Koories: the word we use for ourselves, the people who came here first, in the Dreamtime.
Gubbas: the word we use for the people who started coming here 200 years ago.’

Delia Lowe, 1989. Quoted in Lowe and Davies 2001

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1. EXECUTIVE SUMMARY

The literature provides strong material evidence of long-standing Indigenous interests in the coastal and inshore marine areas of south-east Queensland and New South Wales, including material culture, marine technology, and marine resource use. Coastal Aboriginal communities have always relied heavily on inshore marine resources for food, and to a lesser extent on resources such as turtles, whales, dolphins, and various species of fish, crustacea and molluscs, with offshore connections through their distribution, migration patterns, or their life histories. The approximate 20,000 year history of Aboriginal occupation adjacent to the East Marine Region (EMR) spans a period of significant sea level rise, during which Indigenous peoples were gradually forced to move inland and traditional occupation sites became submerged. This long-term history has implications for interpretation of Sea Country along this coastline.

To date there are no Native Title claims or determinations over waters in the EMR, though six current claims are potentially relevant. In NSW there are four claims by different representatives of the Bundjalung peoples over inshore waters in the Byron Bay area of NSW, with one claim only extending to the 12 nautical mile (nm) limit (the territorial sea line). In south-east Queensland, the Butchulla Land and Sea Claim extends into Commonwealth waters adjacent to Fraser Island, and the Quandamooka people of Stradbroke Island have registered a claim over areas of Moreton Bay. Though unsuccessful, the recent overlapping claim by the Noonukul people of Stradbroke Island, is evidence of enduring Sea Country interests in these areas. Common aspirations of east coast Aboriginal communities focus on continuation of traditional access rights, fishing and hunting, a role in marine planning and management, and opportunities for involvement in commercial use of Sea Country.

The strong Indigenous spiritual connection to Sea Country along the east coast is ongoing. It extends beyond the area of actual resource use, to the EMR (including outside the Great Barrier Reef Marine Park), through traditional stories recording ancestral origins from sea animals, flooded ancestral sites, and enduring totemic relationships with whales, turtles, dolphins and other wide-ranging marine species. The spiritual connections are not readily drawn on a map, and are best presented in the context of a broader Aboriginal cultural landscape that recognises the holistic Aboriginal view of a continuous land and sea Country 'as far as the eye can see'. Indigenous communities welcome the opportunity for engagement in the EMR planning process, based on respect and recognition of cultural values (tangible and non-tangible) and traditional rights, and appropriate use of traditional knowledge.

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2. INTRODUCTION

'The Dreaming lies at the core of Aboriginal spiritual belief - it has no beginning, no end, and does not recognise time linearly, as in days, months and years. It is a part of everyday life, encompassing totems, ceremony, the division of labour, social structure and storytelling'. (Organ and Speechley 1997)

This literature review of Indigenous interests in the East Marine Planning Region (Figure 1) is one of the first steps in developing a Marine Bioregional Plan for the Commonwealth Waters off Australia's east coast (DEW 2007a). The East Marine Region is one of five marine regions around Australia managed under *Australia's Oceans Policy* within a framework of a Marine Bioregional Plan. In 2005 the program increased its focus on biodiversity conservation priorities, as well as protection of economic, social and heritage values, when it was brought under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (DEW 2007b).

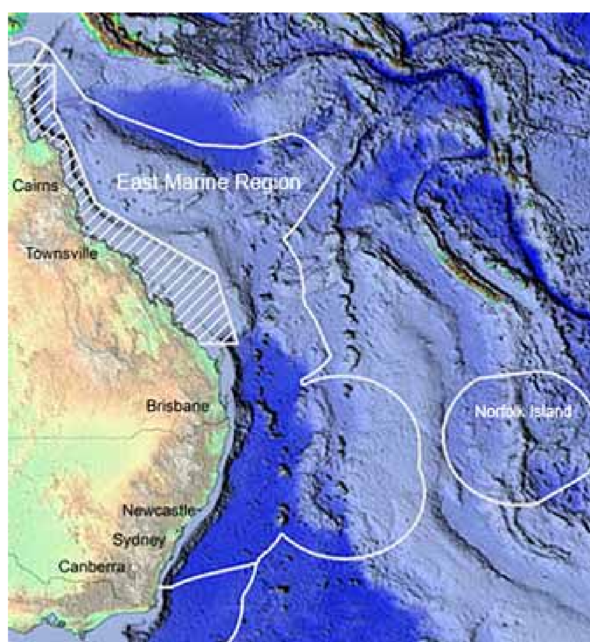

Figure 1: The East Marine Region, with cross-hatching for the Great Barrier Reef Marine Park. From DEW (2007a)

The *EPBC Act* recognises the role of Indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and promotes the use of Indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge (S.3f and g). Native title rights, in particular those covered by Section 211 (*holders of native title rights covering certain activities do not need authorisation required by other laws to engage in those activities*), are not affected by the *EPBC Act* (S.8).

2.1 *Scope of the report*

This literature review summarises information about Aboriginal interests in the East Marine Region (EMR), pre- and post-European contact, including community identity, marine resource use, past and current associations with the Region, current issues, and aspirations of these communities. Whilst the intended focus is Australia's eastern Commonwealth Waters (beyond 3 nm offshore), attention is also given to Indigenous interests in coastal and inshore areas of New South Wales and south-east Queensland, as an indication of likely interests in waters further offshore, and in recognition of Indigenous perceptions of the connectivity between land and sea.

The geographic scope of the report does not include the Great Barrier Reef Marine Park or the Torres Strait. Nonetheless it should be noted that the marine interests of Aboriginal communities adjacent to the Great Barrier Reef may extend beyond the outer boundaries of the Marine Park, particularly in the north. Likewise, Torres Strait Islanders have a rich history as seafarers, and are likely to have interests in the northern extreme of the East Marine Region.

2.2 *Information sources*

Information has been sourced from available printed and web-based material, including published reports and books, research papers, workshop and conference summaries, oral histories and Native Title registration test summaries.

There is a substantial body of literature relating to pre- and post-contact Indigenous interests in the east coast of Australia, adjacent to the East Marine Region, and on Indigenous involvement in coastal zone management. Early published literature is largely from archaeological, anthropological, linguistic and historical studies, while more recent publications include assessments of Aboriginal resource use, social structure, and oral histories that help to personalise the academic studies and provide a broader picture of the 'cultural landscape' in the East Marine Region.

Much of this material has been written with the help of Aboriginal people, but it is important to note that the Aboriginal way of passing information down through the generations is based on oral tradition. Contemporary coastal Aboriginal communities retain strong interests in the sea, and hold knowledge of marine resources, only some of which has been recorded. The project brief did not provide for extensive consultation. However, advice and guidance was sought from relevant Native Title representative bodies and Aboriginal organisations in respect for their relationship to the EMR, and their interests in future involvement in the planning process.

Any such report on Indigenous interests would be significantly enhanced with significant direct input from the people about whom it is written.

3. SEA COUNTRY OF EAST AUSTRALIA

Bundjaling Story

'Long ago, Berrung, with his two brothers, Mommon and Yaburong, came to this land. They came with their wives and children in a great canoe, from an island across the sea. As they came near the shore a woman on the land made a song that raised a storm which broke the canoe to pieces, but all the occupants, after battling the waves, managed to swim ashore. This is how 'the men', the paigal black race, came to this land. If anyone will throw a stone and strike a piece of the canoe a storm will arise, and the voices of Berrung and his boys will be heard calling to one another, amidst the roaring elements. The pieces of the canoe are certain rocks in the sea.'

Quoted in NSW CCA Aboriginal Cultural Heritage Data Audit (DEC 2005a)

3.1 *A Rich History*

The east coast of Australia has a rich history of Aboriginal occupation and marine resource use, believed to date back to between 20,000 and 40,000 years ago (Smyth 1993, Flood 1995). The geological time-span includes periods where the Ice-Age sea level was around 120 metres below today's sea level (Hopley 1982), and Aboriginal people lived on what is now the seabed of the Great Barrier Reef lagoon (Poynton 1995) and the continental shelf off New South Wales (Cruse et al. 2005). As the ice melted, rising sea levels created the Torres Strait and flooded the coastal plain, stabilising at the present level around 6,000 years ago (Smyth 1993). These waters are now part of the East Marine Region (EMR) and the Great Barrier Reef Marine Park.

3.2 *The First Saltwater People of East Australia*

The coming of Aboriginal people to east Australia from ancestors across the sea is told in Dreamtime stories from Queensland and New South Wales (Oodgeroo Nunukul 1999, Organ and Speechley 1997, Wesson 2005). Over 60 Aboriginal tribal groups – the first Australians – made up of numerous sub-groups, and speaking various languages, have been identified along the east coast adjacent to the EMR, their land boundaries recorded by pioneer Australian archaeologist Norman Tindale (Tindale 1974) (Figure 2). Tindale's map provides the basis for a new map of 'Self-identified Aboriginal Nation Groups of NSW' prepared as a 'draft for comment' by the NSW Department of Natural Resources in 2005, in conjunction with its Cultural Landscapes program (DNR 2007) (Figure 3).

The physical evidence of Aboriginal occupation is found in cultural heritage sites along the entire coastline. More than 11,000 sites (ceremonial, occupational, food gathering, and burial sites; art, artifacts, shell middens, fish traps, quarries and scarred trees) have been recorded on the islands and coast of south-east Queensland and along the coast of New South Wales (Ponosov 1967, McNiven 1985, Ulm and Lilley 1999, DEC 2005b). Some of the most significant coastal cultural heritage sites are found on the dunes of Stradbroke and Moreton Islands, and at Byron Bay, Ballina, South West Rocks, Jervis Bay, Bawley Point and Pambula, concentrated in the mouths of resource- rich estuaries (Ponosov 1967, McNiven 1985, Ulm and Lilley 1999, DEC 2005a). Radio-carbon dating tells us that sites just south of Jervis Bay, at Bass Point south of Wollongong, and just north of Newcastle are the oldest sites recorded along the current NSW coast (17,000 to 20,000 years old) (DEC 2005a) (Figure 4). At that time they would have been well inland of the coastline. Local Aboriginal people know of many more, including sites now on the seafloor of the East Marine Region. Other sites have been lost to coastal development and other land uses.

Figure 2: Norman Tindale's map of Aboriginal tribes at the time of contact in south-east Queensland and northern New South Wales (Tindale 1974).

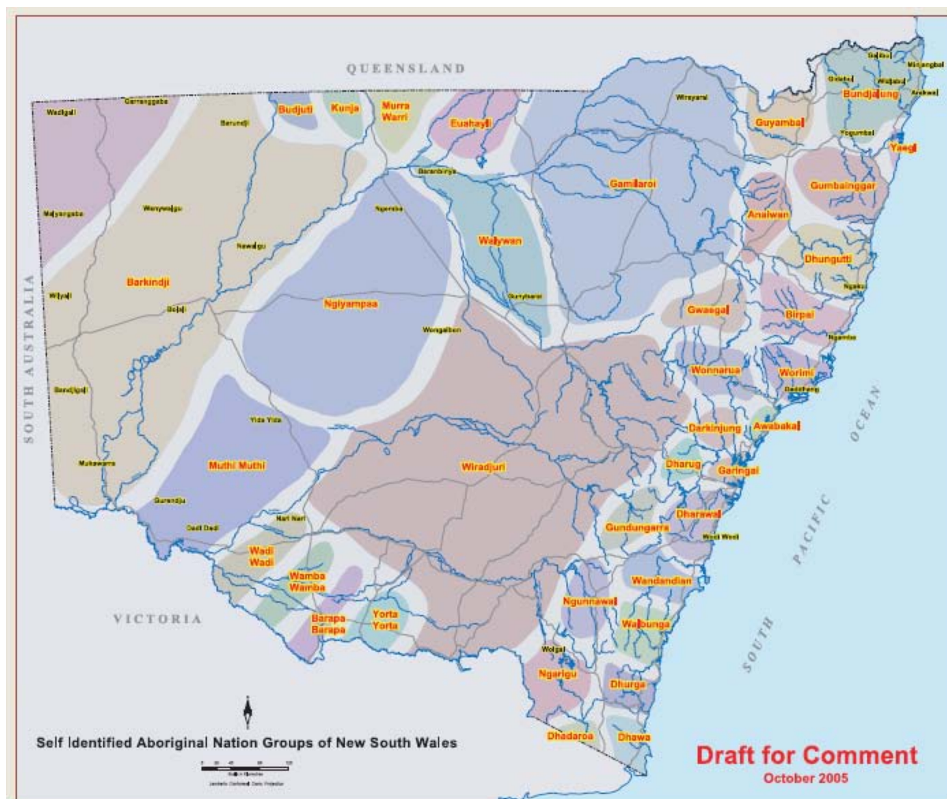

Figure 3: Self Identified Aboriginal Nation Groups of New South Wales. Draft map prepared by NSW DNR for comment, October 2005 (DNR 2007).

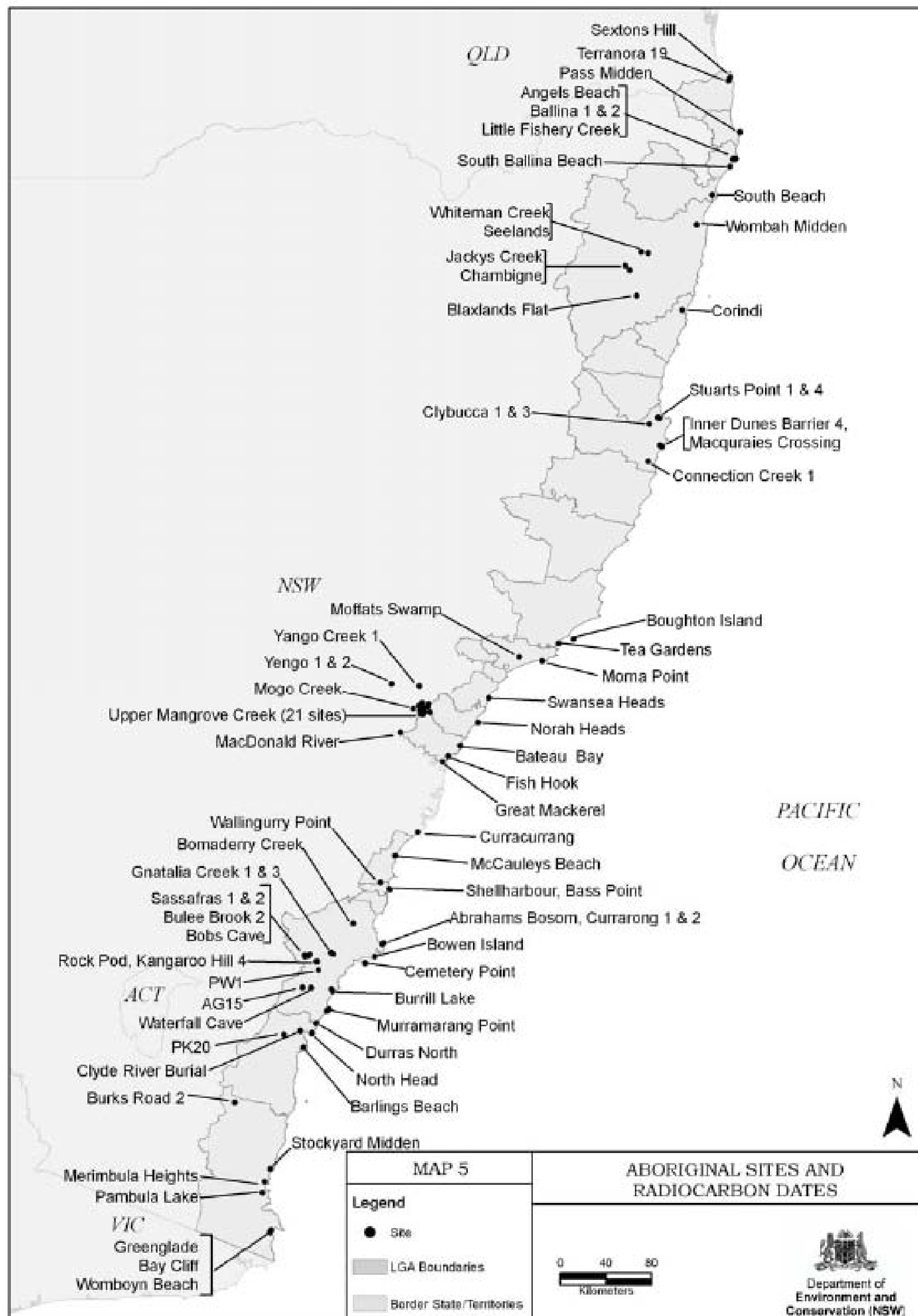

Figure 4: Aboriginal sites and radiocarbon dates on the NSW coastline (Map 5 in NSW Aboriginal Cultural Heritage Data Audit NSW DEC 2005a)

Figure 5: Cultural heritage of south-east Queensland - from Queensland's first cultural heritage map (NRW 2007).

Most of this cultural heritage material, now registered on the State Heritage databases, is relatively 'recent' – less than 5,000 years old – reflecting patterns of occupation and resource use that predominated once the sea level had stabilised (DEC 2005a). Queensland's Cultural Heritage Coordination Unit has just produced its first statewide cultural heritage map which lists more than 200 cultural heritage sites considered significant by Queensland's Aboriginal and Torres Strait Islander people (NRW 2007). The map includes fish traps, story places, shell middens, carved trees, contact sites, engravings and paintings along the coast adjacent to the EMR, with an indication of the coastline at about 18,000 years ago – now submerged by the waters of the EMR (Figure 5). It does not show exact locations due to the fragility of some sites.

3.3 *A Cultural Landscape*

*'An **Aboriginal cultural landscape** is a place or area valued by an Aboriginal group, or groups, because of their long and complex relationship with that land. It expresses their unity with the natural and spiritual environment. It embodies their traditional knowledge of spirits, places, land uses and ecology. Material remains of the association may be prominent, but will often be minimal or absent.'*

(Quote from US/ICOMOS 1996, in DNR 2007)

The New South Wales coastal cultural heritage sites, and broader *cultural landscape* have been mapped in a detailed Comprehensive Coastal Assessment, through the State Planning Department, and the Department of Environment and Conservation (now the

Department of Environment and Climate Change), through extensive engagement with local Aboriginal communities (Andrews et al. 2006), and other local projects (English 2002). The maps show complex patterns of Aboriginal interests along the coast and a network of tracks inland, reflecting the mobility of communities in response to seasonal availability of coastal and terrestrial resources, and reciprocal relationships between mountain and coastal peoples. A big coastal attraction was the seasonal appearance of whales as they migrated up the east coast – before the subsequent European whaling industry reduced their numbers. A beached whale was a regular sight in Twofold Bay (on the NSW south coast), worthy of a celebratory feast, and sufficient to feed Aboriginal people from a wider area (Goulding and Griffiths 2004).

No equivalent cultural landscape mapping has been completed in south-east Queensland, though the new cultural heritage map (NRW 2007) is a step in this direction.

The cultural landscape is a reflection of both past and *ongoing* connection with land and sea country by Aboriginal people. Aboriginal cultural heritage is an important part of the present as well as the past, and provides the basis for ongoing responsibilities, obligations, use, connection and economic and customary rights to Country, of contemporary Aboriginal communities.

3.4 *Food from the Sea*

Net fishing in the Moreton Region

'Each man carries two semi-circular nets, one in each hand, and they run along the shore. Immediately they see the porpoises, which swim only a few metres from the water's edge, several of them rush into the water, form a circle, and each man joins his two nets, thus forming a circle of them. I never saw them come out without some fish in them. They dip their nets beneath the water and then join them, the porpoise the meanwhile not moving the least out of the way or showing any signs of alarm.'

(Notes from Stobart's Journal, 1853, in Love 1985)

Shell middens and fish traps, in particular, provide clues to traditional use of marine resources, the availability of different shellfish, the preferred diets of island and coastal peoples, and changing patterns of fishing. Shellfish remains, more easily preserved than fish or crustacean remains, are the dominant content of shell middens, the kitchen 'dumpsites' of Aboriginal communities. In what is now southeast Queensland, the Kabi Kabi, Ngulungbara, Batjala (Butchulla), Undanbi, Ngugi, Nunukul (Noonukul) and Koenpal women gathered pipis (eugarie shell) from the exposed ocean beaches, and oysters, cockles, and whelks from the more sheltered shores (Ponosov 1967). The men fished for mullet with nets, spears or fish traps, and by driving them inshore from small bark canoes, or even with the help of dolphins, sharing the catch with other community members (Durbridge and Covacevich 1981, Love 1985, Smyth 2001). Traditional hunters – men of status in the communities – speared or netted dugong and turtle from canoes, a favoured food for traditional celebrations.

To the south (now New South Wales), the Bundjalung, Yagir, Gumbaingirr, Dainggatti, Biripi, Worimi, Awabakal, Kuring-gai, Tharawal (Dharawal) and Katung (Yuin) saltwater peoples gathered pipis and cockles (or bimblers) from the sand, and picked limpets, nerites, mussels, periwinkles and oysters off the rocks (Organ and Speechley 1997, Wesson 2005). They fished with spears and lines from rock platforms and canoes, for catfish, snapper, bream, cod, sea mullet, tailor and perch, introducing shell hooks about 700 years ago (Goulding and Griffiths 2004, DEC 2005a). Men dived for kelp, turban shells, abalone (muttonfish), lobsters and crabs. Community hunters caught turtle and the occasional seal for celebratory feasts (Wesson 2005, Australian Museum 2007). The small bark canoes of the southern Aboriginal people were used to carry people offshore to seabird nesting islands, to hunt mutton birds and little penguins, and to gather birds' eggs for annual feasts

(Organ 1990). All along the coast the people shared knowledge of the sea, and traditional stories of marine animal ancestors, such as whales, sharks, dolphins and different species of fish, which provided spiritual connections to offshore waters. For the Tharawal people the dolphin held special powers of protection (the 'policeman'), while killer whales (*murrara*), pelicans (*gurang-aba)* and white breasted cormorants (*berimbarmin*) had spiritual significance as totems (Wesson 2005). The importance of caring for a totem animal extended to safeguarding this animal's habitat and associated food chains, creating a spiritual stewardship of these environments that extended to their protection in the practical sense. All these elements formed the social, cultural, spiritual and economic basis for the connection between humans and the sea.

Wagonga egg feast:

'One fine spring day a large group of about 150 excited adults of the Wagonga tribe paddled their 80 bark canoes across the glassy sea to Montague Island, four miles distant, while the women and children watched from the shore. It was the much-anticipated day of the annual egg feast picnic. After a successful day of egg gathering, the people headed back to the mainland in their flotilla of canoes, with much laughter and excitement. When the voyagers were barely half a mile from the home shore, a dark cloud from the south suddenly blew up into a violent storm, sweeping everyone into the sea while the terror stricken families looked on. Not one soul landed to tell the fearful tale.'

Adapted from the full length story in Organ 1990, p. 353

Summaries of marine resource use by early Aboriginal people in the Sydney and Illawara areas (Wesson 2005, Australian Museum 2007) provide comprehensive lists of plant and animals valued by coastal communities. Many of the animals listed have connections to the East Marine Region (Table 1), and most likely to other regions further afield, through their wider distribution (e.g. whales, seals, turtles, dolphins, pelagic fish, seabirds) whilst many crustacea (lobsters, crabs, prawns), shellfish (abalone, cockles, topshells) and inshore fish species, have free-living larval stages which could potentially extend their distribution offshore.

Table 1: Marine resource use in the Sydney and Illawarra areas, with potential connections to the EMR (Wesson 2005, Australian Museum 2007).

MARINE/INTERTIDAL RESOURCE **Dharawal,** common and *scientific* names	**SOURCE AND USE**
SHELLFISH	
Rock Oysters *Saccostrea glomerata*, Mud Oysters *Ostrea angasi* Hairy Mussels *Trichomya hirsute*, Sydney Cockles (conk, bimbler) *Anadara trapezia*	Flesh eaten. Shells found in shell middens around Sydney Harbour, Botany Bay and Broken Bay. Cockles also found extensively in Illawarra middens.
Most common: Hercules Club Whelks *Pyrazus ebeninus* Limpets *Cellana tramoserica* Black Nerita *Nerita atramentosa* Less common: Cartrut *Dicathais orbita* Turbans *Turbo torquata* & *Turbo undulata* Spengler's Triton *Cabestana spengleri*	Flesh eaten and used as bait. Shells found in middens along the ocean coastline, with a greater range of species.
Periwinkle *Bembicium* sp.	Flesh eaten. Harvested at Shell Harbour, Bass Point.

MARINE/INTERTIDAL RESOURCE **Dharawal,** common and *scientific* names	**SOURCE AND USE**
Walken (Nullica language), Abalone, Mutton Fish *Haliotis* sp, *Notohaliotis* sp.	Flesh eaten, shells used for fish hooks and jewelry. Gathered by hand and divers on south coast.
Top Shell *Trochus* sp.	Flesh eaten; shell used for artefacts.
CRUSTACEA	
Yangah, Spiny Lobster or Sea Crayfish *Jasus verreauxi* Blue Swimmer Crabs *Portunus pelagius* Mud Crabs *Scylla serrata* Eastern King Prawn *Penaeus plebejus*, Eastern School Prawn *Metapenaeus maclyeayi*	Lobster caught in small hoop nets in the Sydney region. Flesh eaten. Claws used to decorate men's hair, attached by gum. Fragments of crabs and crayfish found in archaeological material in Sydney Harbour.
FISH	
Most common: **Woolimai** Snapper *Pugus auratus* **Karóoma (Caroom-a)** Black Bream *Acanthropagrus australis* Also present: **Birragullin** Tailor *Pomotamus saltatrix* **Wa-ra-diel** Mullet **Murray-naugul** Flathead **Kurrawinna** Groper + Morwong, Tarwhine, Leatherjacket, Yellowtail Kingfish, Australian Salmon, Trevally, Luderick, Wrasse/Parrot Fish, Whiting, Flounder, Catfish, Mulloway, Wirrah and Rock Cod	Flesh eaten. Remains found in coastal middens.
Kurranwall, Kurra-wah, Puppur Stingray, *Dasyatis* sp.	Flesh eaten, dried skin used as sandpaper to sharpen utensils, and cutting into the hard skin. Spines used for spears. Also depicted in art and engravings in Dharawal coastal sites.
Murra murra, Dibara Sea mullet *Mugil cephalus*	Flesh eaten and used in fishing: 'mullet fat thrown in little pieces on the waves will make the water smoother while people are fishing'.
MARINE MAMMALS	
Common dolphin *Delphinus* sp.	Totemic animal. The policeman for the Dharawal people: 'We talk about being created from a dolphin. The dolphin is regarded as part of our ancestry.'
Burri-burri, Murrara 'killer whales': Southern Right *Eubalaena glacialis* Humpback *Megaptera novaeanglaise* Blue Whales *Balaenoptera musculus*	Blubber, meat and organs eaten. Bones used for implements; depicted in art sites; totemic animal. Whales known to beach themselves along the NSW coast (June to October). A single whale would provide a feast for large groups of Aboriginal people, traveling from inland and along the coast. Engraved whales found on rock platforms along the coast and around the shores of Sydney Harbour, e.g. at Balls Head, Waverton and Grotto Point at Clontarf.
Wan yea-waur, Seals Australian Fur Seal *Arctocephalus pusillus*	Small amounts of seal bones found in coastal shell middens, suggesting that they were hunted by

MARINE/INTERTIDAL RESOURCE **Dharawal,** common and *scientific* names	**SOURCE AND USE**
	Aboriginal people – probably not a major food item. Seals were plentiful along the NSW coast to just north of Newcastle, prior to extensive hunting by Europeans in the mid-1800s.
Dugongs *Dugong dugong*	Bones unearthed at Sheas Creek in St Peters in the 1880s, have cut marks and scars on their surface, suggesting butchering. Dugong remains an important part of the Aboriginal diet in northern Australia and Queensland.
REPTILES	
Turtles: Green Turtle *Chelonia mydas* Leatherback Turtle *Dermochelys coriacea* Loggerhead Turtle *Caretta caretta*	Remains of turtles found at Balmoral Beach and Cammeray, on Sydney Harbour, suggest that turtles may have been captured and eaten.
BIRDS	
Mutton Bird, Short-tailed Shearwater *Puffinus tenuirostris*	Flesh and eggs eaten. Bones used as prongs for fishing spears. Fragments found in archaeological sites. Mutton Birds visit Australia's east coast annually September - January to breed in sandy burrows. Birds and eggs harvested from the Five Islands. Still hunted and eaten by Aboriginal communities in south eastern Australia (NOO 2002).
Little Penguin *Eudyptula minor*	Flesh and eggs eaten. Bones used as prongs for fishing spears. Fragments found in archaeological sites. Eggs harvested from the Five Islands (Illawarra).
Kurungabaa, Pelican *Pelicanus conspicillatus*	Totem animal.

Before the Europeans arrived in Australia, the subsistence economy and social fabric of coastal Aboriginal people was based on access, use, sharing and trading of marine resources. The sea provided essential food and materials for implements, utensils and decoration, and defined peoples' customary roles in a community (e.g. hunters and gatherers). Marine resources were also part of the spiritual wellbeing of coastal Indigenous people, through totemic relationships, ancestral stories and inherited cultural obligations.

4. IMPACTS OF COLONISATION

When the sky fell down – a Dreaming story to explain the coming of strangers.
'The solid vault of the sky rested on props placed at the extreme edge of the earth. News came that the eastern prop (near Sydney) was rotting and if gifts were not sent to the guardian the sky would fall, and the white-skinned ghosts or reincarnations of all the blackfellows who ever lived would break through from the spirit world to swarm over the land. The landscape and all of its Dreamtime associations would be transformed. Everybody would be killed.'
Quoted by Organ and Speechley (1997)

4.1 *The Coming of Strangers*

The arrival of white colonists on the east Australian shores in 1770 was a meeting of two very different cultures with conflicting laws about land and sea. Under customary laws, Aboriginal people have inherited ownership, rights of access and use, and responsibilities to 'care for their Country', which for coastal, or Saltwater, people includes the sea 'as far as the eye can see'. The rights of each group are respected by others, forming the basis for sustainable use and management of Country. The Europeans arrived, ignorant of the Aboriginal way, with the belief that the sea was for everyone and the land was for the taking. In just over 200 years the east coast Aboriginal people were dispersed and dispossessed of their land and sea country, their numbers decimated by conflict and disease (Smyth 1993). As the colonists spread north and south from Botany Bay they exploited marine resources that once belonged to the Traditional Owners, and introduced whaling, sealing and fishing industries. They took more from the sea than was needed for immediate consumption, to trade and sell. They also exploited, and benefited from, Aboriginal traditional knowledge and skills by employing Saltwater people, often in return for unsuitable processed foods. In the process, many of the survivors lost their physical connection to their sea country, but the spiritual connection endured.

4.2 *A New Way of Living*

Today more than half of Australia's Indigenous population (Aboriginal and Torres Strait Islander peoples) live in Queensland and New South Wales (3% and 2% of the respective State populations) (Australian Bureau of Statistics 2001). Almost a third of Indigenous people now live in cities along the coastline and amongst communities of 'new Australians' from different cultures, and less than a quarter of Indigenous people live in their traditional country and community structure (Australian Bureau of Statistics 2004). A national Aboriginal and Torres Strait Islander Social Survey in 2002 estimated that over half the Indigenous population still identify strongly with their clan, tribal or cultural group (Australian Bureau of Statistics 2004). Although the competing interests in marine resources, introduction of European foods and imposition of new laws have changed Aboriginal people's relationship with the sea, the spiritual and family connections to traditional country remain strong and carry with them ongoing obligations to look after Country.

Aboriginal people are more dispersed and more likely to live in remote locations than other Australians (Memmott and Moran 2001). Along the eastern North Queensland coastline, adjacent to the northern tip of the EMR, remote Aboriginal communities have more opportunity to maintain their cultural connection with the sea. Here Aboriginal people still hunt, fish and gather seafoods – but within management constraints such as zoning, permits, bag limits, and negotiated agreements with the Great Barrier Reef Marine Park Authority.

5. FISHING, HUNTING AND GATHERING

5.1 *Providing for All*

In spite of the loss of many traditional Aboriginal fishing sites to coastal development in south-east Queensland and New South Wales, fishing remains an important activity for Aboriginal people and a source of protein in their diet. It is customary to take sufficient for the family and community, but competition from non-Indigenous fishers and other Indigenous cultures has made it increasingly difficult for Aboriginal people to fish – and to eat – as they used to. Commercial interests have put a monetary value on certain fish and shellfish (Cruse et al. 2005), and all fisheries (recreational and commercial) are now subject to management by government agencies. In most cases new laws and regulations do not recognise 'subsistence fishing', and what was once a traditional right under customary law has become in some cases a criminal offence under common law (Smyth 1993, Moore and Davies 2001).

The sense of changing times is reflected in the memories of Saltwater women from Stradbroke Island, Queensland (Oodgeroo Nunukul 1999) and from the NSW towns of Nowra, Port Stephens and Wollongong (DEC 2004a, b, c). The documented interviews of NSW women capture the personal perspectives on life in the mid to late 1900s. The interviews record the continuing use of shellfish (oysters, conks *Anadara trapezia,* periwinkles *Bembicium* sp., pipis, muttonfish (abalone, *Haliotis* sp), cunjevoi, mudworms, crabs, prawns, lobsters and fish (mullet, groper, flathead, brim, whiting), as well as the loss of the traditional ways.

Memories of a Saltwater woman: Gwen Russell, Port Stephens

'There are still some Aboriginal lookouts around the Port where the Aboriginal men used to climb up to spot the mullet coming in. They would signal and let others know so they could get to put a net around the catch. They still do it today as a matter of fact. The fishermen today stand on the cliff to spot the mullet coming. Then they run a net out on the beach and get them all. So it's still happening. It happens today with non-Indigenous fishermen……All the community people fished. And when you got a big catch of fish you shared it. Sharing was a big part of life. They still do that sort of thing now. If someone went out and got a feed of fish, and if it were more than they needed, they'd share it with everyone in the community.

Extract from Aboriginal Women's Heritage interview (DEC 2004c)

5.2 *Dugong and Turtle Hunting*

Hunting for dugong and marine turtle remains an important tradition in contemporary Aboriginal communities along the EMR (Information Box: *Dugong hunting in the EMR*) and is generally managed by the communities through customary law. The role of traditional hunter is well respected within a community, and assigns a certain social status. Dugong and turtle are culturally, spiritually and economically significant to Indigenous people in coastal Queensland where they are traditional foods and totemic animals. Once a regular food in Saltwater people's diet, dugong and turtle are now more likely to be reserved for special occasions and ceremonies in southern Queensland.

The seagrass beds of Hervey Bay and Moreton Bay are a significant food source for marine turtles. Species most commonly found in the area include green turtles (*Chelonia mydas*), loggerhead turtles (*Caretta caretta*) and hawksbill turtles (*Eretmochelys imbricatata*).

Leatherback turtles (*Dermochelys coriacea*) and flatback turtles (*Natator depressus*) also visit the bay occasionally (QPWS 1999).The largest mainland nesting site for loggerhead turtles is at Mon Repos, north of Bundaberg, just outside the boundary of the East Marine Region. To the south the Butchulla Nglungabara people of Fraser Island still hunt for loggerhead turtles in the waters to the north of the island.

Traditionally dugong were trapped in nets from bark canoes, but are now hunted from dinghies with outboards, using traditional spears (in Durbridge and Covacevich 1981). Such changes in technology present challenges to management, and are being reviewed through the National Partnership Approach for the Sustainable Use of Turtle and Dugong. An initiative of the Natural Resource Management Ministerial Council, the 'Partnership' enables Indigenous people to work with governments to develop ways to manage sustainable hunting of dugong and turtle in northern and eastern Australian waters (DEW 2007b).

Dugong hunting in the EMR

The seagrass beds of Hervey Bay and Moreton Bay provide the southernmost important dugong areas of Queensland's coast (UNEP 2002), and important traditional hunting areas. Today, dugong are hunted less frequently by local Aboriginal peoples, and used mostly for special feasts and cultural ceremonies. Some Aboriginal people (Butchulla of Fraser Island, Quandamooka of Moreton and Stradbroke Islands, and Noonukul of Stradbroke Island) seek the right to hunt turtle and dugong as part of their recent or current sea claims in the area (National Native Title Tribunal 2007), while others have chosen not to hunt: *Today, when the white man's food is eaten so widely by Aborigines, the tribe no longer hunts the dugong. They believe that to hunt dugong when their bellies are full would be to act against the natural law of 'kill to eat'* (Oodgeroo Nunukul 1999).

Archaeological and geological finds of dugong bones near Sydney suggest that coastal Aboriginal communities of New South Wales may have hunted dugong during periods of warmer climate 6,000 years ago, when the animal's southern limit extended further south (Haworth et al. 2004). The most significant contemporary record of dugong south of Moreton Bay was in 1992 following flooding in central Queensland that killed large areas of seagrass in Hervey Bay, forcing dugong to seek food outside their normal range (Allen et al. 2004). Dugongs tend to remain close to the coast, and rarely move offshore into Commonwealth waters, though long-distance movements have been recorded (Sheppard et al. 2006).

Now classified as 'vulnerable to extinction' on a global scale (UNEP 2002), dugong are under threat from habitat loss, fishing pressure, boat-related impacts and, in some cases, from hunting. Local management strategies in place include commercial netting restrictions in the Hervey Bay Dugong Protection Area, control of coastal runoff, 'Go Slow' boating areas in Moreton Bay Marine Park, a Moreton Bay 'Dugong Watch' monitoring program and seagrass monitoring. Moreton Bay Indigenous people are also working with governments to develop sustainable hunting practices under the new national 'Partnership' arrangements (Kwan 2007).

5.3 *Indigenous Fishing Surveys*

The only Indigenous fishing survey conducted on the EMR coastline, in eastern North Queensland, found that 93.3% of Indigenous people participated in fishing, and about 5% of the fishing occurred in waters further than 5 km offshore (Coleman et al. 2003) . The technique used most often was line fishing (~70%), followed by diving and nets (~10% each), with a small proportion of hand collecting and trapping (~4% and 1% respectively). The most abundant species caught were mullet, snapper, bream, barramundi and mud crabs – some with larval connections to offshore waters.

There is no equivalent detailed survey of Indigenous fishing in south-east Queensland and New South Wales. The National Recreational Fishing Survey (Commonwealth of Australia 2003) identified New South Wales as the State with the highest number of recreational fishers, followed closely by Queensland. Most (76%) recreational fishing occurs in estuarine and coastal waters, and only 4% in offshore waters (in the EMR). It is likely that Indigenous people are included in this data, though they do not consider fishing to be a recreational pursuit, but an integral part of their traditional economy.

'We are not recreational fishers. We are traditional owners of the country and its waters. We have fundamental, inherent indigenous rights to manage, use and protect our traditional country, including marine and inland waters. These rights arise out of our particular relationship to our country, our Native Title to our lands and waters…… We are not just another 'user group' of a limited resource.'

Quote by Peter Yu, Director of the Kimberley Land Council, in Sutherland (1996)

A series of coastal fisheries discussion papers (NSW Fisheries 2001) summarised Indigenous fishing interests in eight coastal regions in NSW, listing the most active Aboriginal communities who still fish, using hand gathering, lines, rods, reels, nets, traps and spears, and the target species (Table 2). The fisheries review identified coastal and estuarine sites of potential recreational, Indigenous and commercial fishing conflict, and resulted in the creation of 30 Recreational Fishing Havens which are protected from commercial fishing, but do not include any specific provisions for Indigenous fishing. Most of the species listed are inshore species. The most likely fish species with connection to the EMR waters is Tailor, *Pomatomus saltatrix*, which spawns offshore (e.g. off Fraser Island), and is the basis for a commercial beach-netting industry along the east coast (Miskiewicz et al. 1996). Lobsters, mud crabs and swimming crabs also move offshore to spawn and have free-living larval stages in EMR waters.

Table 2: Indigenous fishing interests in coastal NSW, summarised from NSW Fisheries Issues Papers (NSW Fisheries 2001).

NSW COASTAL REGION	INDIGENOUS COMMUNITIES WITH FISHING INTERESTS	TARGET SPECIES All regions include: mullet, flathead, whiting, **tailor**, bream and blackfish.
1. Evans Head north to the Queensland border	Tweed, Fingal, Byron Bay, Ballina, Cabbage Tree Island and Evans Head, and some inland communities.	+ mud crab, oysters, pipis, beach worms and river worms - pipi gathering important.
2. South of Evans Head to Woolgoolga	Coffs Harbour, Evans Head, Yamba, Maclean and Corindi/ Arrawarra. Also accessed by Coff's Harbour. Aboriginal community, as well as some inland communities including Coraki and Grafton.	+ mud crab, oysters, pipis, beach worms and river worms - pipi gathering important .
3. South of Woolgoolga to Port MacQuarie	Coffs Harbour, Nambucca Heads, Bellwood, Macksville, South West Rocks, Hat Head, Crescent Head and Port Macquarie.	+ mud crab, oysters, pipis, prawns, beach worms and river worms - beach worming important.

4. South of Port MacQuarie to Seal Rock	Taree / Purfleet and Forster.	+ mud crab, oysters, pipis, prawns, beach worms and river worms.
5. South of Seal Rocks to The Entrance	*No specific communities identified*	+ mud crab, oysters, pipis, prawns, beach worms and river worms – beach worming and shellfish gathering important.
6. South of The Entrance to Wollongong	*No specific communities identified*	+ mud crab, oysters, pipis, prawns, beach worms and river worms – beach worming and shellfish gathering important.
7. South of Wollongong to Narooma	Narooma, Bateman's Bay, Moruya and Ulladulla, and some inland communities.	+ mud crab, oysters, cockles and abalone – abalone harvesting extremely important.
8. South of Narooma to Victorian border	Narooma, Bermagui, Bega and Eden, as well as some inland communities.	+ crabs, lobsters, oysters, cockles, whelks, abalone and beach worms. Abalone, crab and lobster harvesting important.

One of the most enduring and controversial traditional fishing interests in southern NSW is the gathering of abalone (*Haliotis ruber*), known as mutton fish or *Walkun* in the language of the Nullica people from Twofold Bay (Information Box *Mutton fish – a dying tradition?*).

Mutton fish – a dying tradition?

In traditional times, when Aboriginal people gathered food from the ocean, particularly mutton fish, it was a cultural thing that took place many years ago. But we know that from my forefathers, particularly from my dad and my uncles. They taught me how to gather mutton fish along the south east coast of NSW. The mutton fish were gathered for food and many times we gathered them to trade…..There was a special way of processing mutton fish…it was there on the rocks that the meat of the shellfish was taken out of the shell. And the shell was always left on the tidal line. The mutton fish was pounded on the rocks there to tenderise, and taken home and cooked… When we took mutton fish home we shared with others, that was the traditional thing.'

Quoted by Ossie Cruse in Cruse et al.(2005)

For thousands of years, the shellfish abalone ('mutton fish' or Walkun) has been a traditional food of coastal Aboriginal communities in southern NSW. During the gold rush in the mid-1800s entrepreneurial Chinese miners, who considered mutton fish a delicacy, established the abalone fishing and trading business, employing experienced Aboriginal divers to work with them from beach camps on the south coast (Cruse et al. 2005). The mutton fish meat was sold to the Chinese and the shells to Europeans for the button industry. Some Aboriginal people were able to make a reasonable living from mutton fish as the markets opened up.

By the 1960s 'the Koori's long-ignored subsistence food, the humble mutton fish, was in demand and lives changed as divers came from all over Australia and New Zealand to grab what they could' (Cruse et al. 2005). The fishery grew rapidly from 18 tonnes in 1964-65, peaked at 1,200 tonnes in 1971, and dropped dramatically to 300 tonnes in 1977. Fishing controls were introduced in the late 1970s through fishing permits that endorsed collection of abalone, turban shells and sea urchin eggs. In 1980 the abalone fishery became a 'limited entry fishery' and permits were only issued to divers who could demonstrate catches above a defined limit, and prove that it was over half of

their income. This excluded most Aboriginal fishers at the time, and they must now comply with recreational size and bag limits (two abalone per day), or apply for a cultural fishing permit if they are to enjoy this traditional seafood. The first such permit was issued in 2003, and rigorous inspection and marking of the catch by Fisheries inspectors raised doubts in the minds of the traditional fishers as to the sincerity of the 'cultural concession' (Cruse et al. 2005).

Today the share-managed fishery is well out of the reach of most Aboriginal fishers. The lucrative industry, worth about $5m annually, is heavily policed by NSW Fisheries. Several traditional abalone divers from the south coast have fought for what they believe to be their customary right to take as many abalone as they want and to clean them on the rocks, by way of their Aboriginal 'religion', and in so doing they have been prosecuted for 'poaching' (Cruse et al. 2005), restricting their chances of obtaining a licence in the future. Fisheries managers are currently targeting organised syndicates of illegal fishers along the coast (NSW Fisheries 2007).

In 2007 the fishery is facing an additional threat in coastal waters from Port Stephens to Wreck Bay, where a 'naturally occurring' parasite Perkinsus (possibly exacerbated by sewage discharge) has had a devastating effect on stocks around Terrigal, Sydney, Kiama and Port Stephens, causing abalone numbers to drop to just 5% of their former populations.

There are current doubts about the future of the NSW abalone fishery and options being considered include the development of an aquaculture industry with opportunities for Indigenous training and employment. Coastal Aboriginal people have aspirations for a community abalone licence, owned and managed by the Local Aborigial Land Council for the benefit of the community (Cruse et al. 2005).

5.4 *A Living from Fishing*

'The Blackfellow's Boat

It is some time since we drew attention to the fact that the aborigines of this district were to be presented with a fishing boat and fishing tackle by the Government. It is now our pleasing duty to chronical the arrival at Port Kembla of the little craft referred to. On last Sunday three or four blacks accomplished a voyage from La Perouse to the Mount Kembla Coal Co's jetty in seven hours, having selected a day on account of the wind being favourable. The boat is a splendid one, fitted with every appliance, and a suitable net completes the outfit. It is to be hoped, now that their business in selling fish will bring the blacks frequently into town, the law prohibiting their being supplied with intoxicating drinks will be rigidly enforced.'

11 April 1883: Wollongong Argus report on the purchase of a fishing boat for the Aborigines at Lake Illawarra (p. 342 in Organ 1990).

There are various records of early Aboriginal involvement in commercial fishing operations run by Europeans and even Chinese settlers, including participation in abalone fishing, and whaling operations on the southern NSW coast (Butler et al. 2002, Blay and Cruse 2004).

The first shore-based whaling station was established at Twofold Bay (near Bega) in the 1830s, attracting Aboriginal people to the bay for employment and for the offal that was available. By the 1840s, whaling had a strong influence on the patterns of Aboriginal settlement, with many Aboriginal people moving to live close to the whaling stations.

Aboriginal people lived as 'white men' during the fishing season and then returned to the bush once the whaling was over (Goulding and Griffiths 2004).

'At Imlay's whaling station the natives make very good whalers and many of them are employed by Imlay who gives them slops, provisions etc. in return for their services…Their sight is better and they see the fish sooner than the white man…'(Oswald Brierly's notes, 1842)

In the late 1800s to mid-1900s the government encouraged coastal Aboriginal groups to make a living from fishing, by subsidising fishing boats. However, Aboriginal commercial fishermen often attempted to continue to fish according to traditional and sustainable practices, but found that their methods were often rendered illegal by modern fisheries legislation (Hawkins 2004).

Enterprising Aboriginal people also used their fishing skills to support their own small-scale lobster and abalone trading activities:

'Many is the time I came home to Yonga to find black gins waiting there with fish and lobsters for us. The first we might know was when we would see green lobsters alive scrambling around on the verandahs or covered way leading to the kitchen. Anyhow, business would be done, and beautiful big fish and lobsters would be traded in return for money or clothes and always a good feed for the gins thrown in'.
Jean Robertson 'An octogenarian remembers'.

Illawarra Historical Society Bulletin July 1978 (DEC 2005b)

In Jervis Bay, in the 1960s, Bundarwa and Berri-werri Aboriginal families were engaged in commercial estuarine and beach netting at Wonboyn (Lowe and Davies 2001), no doubt using fishing skills and knowledge passed on from generation to generation (Hawkins 2004).

In Queensland, under the State fisheries legislation, Indigenous people can apply for a community fishing licence, though the only successful Aboriginal commercial fishing enterprise to date has been at Mapoon (western Cape York) where a crabbing and gill-netting business was supported by Balkanu Development Corporation and Westpac Banking under the Cape York Partnerships Program (Barnett 2005).

The most likely opportunities for Indigenous involvement in commercial fisheries is in aquaculture. In 2003 the Australian Department of Agriculture, Fisheries and Forestry (DAFF) established the Indigenous Aquaculture Unit within the National Aquaculture Development Strategy for Indigenous Communities in Australia (DAFF 2007) to support various aquaculture programs, mostly in the north. There are several aquaculture programs currently under development in Queensland and NSW with Indigenous involvement, including:

- The Indigenous aquaculture program established by Queensland's DPI&F in the north, to progress business opportunities, with advice from the North Queensland Indigenous Aquaculture Working Group (NQIAWG)
- North Stradbroke Island (Queensland) sea cucumber (bêche-de-mer) farming industry and export fishery, with training and employment for 12 local Indigenous people, funded by the Australian Government ($900,000) (Austasia Aquaculture 2005)
- NSW DPI partnership with South Coast NSW Aboriginal Corporation, SCNAAC (includes the eleven coastal LALCs between Wollongong and the Victorian Border), to explore funding opportunities for Aboriginal aquaculture enterprises, such as the Bodalla Local Aboriginal Land Council oyster lease at Wagonga Inlet (Ian Abbott, NSW Fisheries, pers. comm.)
- Wollongong Aquaculture Aboriginal Corporation feasibility study for a fish farm proposal at Bass Point (Shellharbour)

- NSW Fisheries developmental abalone aquaculture industry, based on a hatchery at Port Stephens Research Station, and an abalone farm at South Pindimar (NSW south coast, Great Lakes Council), proposed by Austasia Leefield Pty Ltd (Austasia Aquaculture 2005).

The small short-fin eel fishery (Information Box: *The Kooyang Connection*) which operates from Victoria to Queensland, is of greater spiritual significance to Aboriginal people in the South-east Marine Region than to those in the EMR – an example of external Indigenous interests in this Region.

The Kooyang connection

The Short-fin Eel (*Anguilla australis*), is one of the target species of small but valuable fisheries in Victoria, New South Wales and Queensland. The fisheries are Commonwealth managed because the eels spend part of their life in Commonwealth and international waters as they migrate from the South-east Marine Region, up through the East Marine Region, to spawning grounds in the South Pacific. The eel fishery is heavily regulated in all states; in Queensland it has been managed as a closed fishery since 1999, with non-transferable licences, and harvesting only allowed in impoundments such as dams (DPI&F 2007). The short-fin eel ('Kooyang') is also an important symbol, and the basis of a traditional economy, for the Gournditch-Mara Aboriginal people of South-west Victoria (Framlingham Aboriginal Trust and Winda Mara Aboriginal Corporation 2004). The eel does not appear to have the same level of significance to Aboriginal people in Queensland and New South Wales.

Overall, the competing interests of European commercial fishers, and of coastal development, and the unachievable costs of obtaining licenses, skills, business knowledge and basic equipment (Wanganeen 2003), has gradually meant that Aboriginal people have very little involvement in commercial fisheries (Moore and Davies 2001). There is widespread concern among coastal Aboriginal people that they are denied benefit from the commercialisation of marine resources that once belonged to them, and without their consent (Smyth 2001).