Dhimurru Indigenous Protected Area Cultural Heritage Management Plan 2009 to 2015

Prepared for Dhimurru by Daryl Guse (Earth Sea Heritage Surveys) and with revisions from Dhimurru Staff

Cover Image – Djerrŋu Marika (Yunupiŋu) Collecting Madbalk in the Dhimurru IPA © Jane Dermer

Dhimurru Aboriginal Corporation

PO Box 1551 Nhulunbuy N T 0881

ABN: 95 520 121 809
ACN: 1558

Ph: (08) 8987 3992
Fx: (08) 8987 3224

Web: www.dhimurru.com.au
E-mail: nhamirri@dhimurru.com.au

CONTENTS

CONTENTS 2
Figures 4
Tables 4
Glossary 5
Notes on Yolŋu orthography 6
INTRODUCTION 7
Dhimurru Indigenous Protected Area 7
Indigenous Cultural Heritage Management 8
Resources 11
Land Tenure 13
Environmental Setting 13
Climate 13
Geology 13
Physiographic Groups 14
Vegetation 14
HERITAGE MANAGEMENT PRINCIPLES 15
Defining Indigenous Cultural Heritage 15
Burra Charter 15
Ask First: A guide to respecting Indigenous heritage places and values 16
IUCN Sacred Natural Sites: Guidelines for Protected Area Managers 17
Cultural Heritage Legislative Obligations 18
Table 1. Legislative basis for protection of Cultural heritage places in the Northern Territory 18
Northern Territory Heritage Conservation Act 1991 19
Environment Protection and Biodiversity (EPBC) Act 1999 20
Northern Territory Sacred Sites Act 1989 21
Aboriginal Land Rights Act (Northern Territory) 1976. 22
Aboriginal and Torres Strait Islander Heritage Protection Act 1984. 22
Table 1 IPA Recreation areas and management activities 23
Figure 2 IPA Recreation Areas 24
Table 2 Places listed on the former Register of the National Estate 25
Yolŋu Sacred Sites 27
Table 3 Some Recorded and Registered Sacred Sites in the Gove Peninsula 27
Indigenous and Macassan Archaeological Sites 28
Table 4 List of previously recorded archaeological sites in the Nhulunbuy region 28
Yolŋu Historic Heritage 33
Japanese Pearling 34

Yirrkala Mission 34
World War 2 34
ELDO 35
MINING 35
YOLŋU SIGNIFICANCE OF THE IPA 36
Caring for Manydarrarrnga-Nanydjaka 36
Patri-moieties: Dhuwa and Yirritja 37
Subsections 38
Matha 38
Patri-groups 38
Exchange 40
Land Use and Maintenance 40
Art and Ceremony 41
Macassan Connections 41
Indigenous Archaeological Site Significance 44
IMPACTS AND MANAGEMENT ISSUES 46
Regional Economic Pressures 47
Governance Issues 47
Climate Change 48
HERITAGE CONSERVATION MANAGEMENT POLICY CONSIDERATIONS 48
Indigenous Heritage Management Database 50
Partnerships 51
Indigenous Heritage Recording and Research 52
HERITAGE POLICY 1: SACRED SITES 52
Definition 52
Potential and Current Impacts 52
Statement of Heritage Significance 52
Conservation Statement 53
HERITAGE POLICY 2: INDIGENOUS , MACASSAN, AND MARITIME ARCHAEOLOGICAL PLACES 53
Definitions 53
Statement of Heritage Significance 54
Conservation Statement 55
HERITAGE POLICY 3: INDIGENOUS PLACES OF HISTORIC CULTURAL SIGNIFICANCE 55
Definition 55
Potential and Current Impacts 55
Statement of Heritage Significance 55
Conservation Statement 56

HERITAGE MANAGEMENT ACTIVITIES 56
TRAINING 58
KNOWLEDGE GAPS AND INFORMATION MANAGEMENT 60
SHARING KNOWLEDGE AND PUBLIC EDUCATION 61
BIBLIOGRAPHY 62
APPENDIX 1. RECORDING INDIGENOUS CULTURAL HERITAGE PLACES 66
Indigenous Heritage Place Recording 66
Writing Reports on Indigenous Cultural Heritage Places 67
APPENDIX 2. WORKPLAN 69

Figures

Figure 1 Dhimurru IPA 10
Figure 2 IPA Recreation Areas 24
Figure 3 Archaeological sites in the IPA region 30
Figure 4 Frequency of archaeological site features represented on previously recorded archaeological sites in the Gove Peninsula area (nt21) 32

Tables

Table 1 IPA Recreation areas and management activities 23
Table 2 Places listed on the former Register of the National Estate 25
Table 3 Some Recorded and Registered Sacred Sites in the Gove Peninsula 27
Table 4 List of previously recorded archaeological sites in the Nhulunbuy region 28

Glossary

CHMP	Cultural Heritage Management Plan
Dhimurru	Dhimurru Aboriginal Corporation
ICOMOS	International Council Monuments and Sites
IPA	Indigenous Protected Area
AAPA	Aboriginal Areas Protection Authority
IHP	Indigenous Heritage Programme
NLC	Northern Land Council
NRETA	Natural Resources, Environment and the Arts (NT Department)
NRS	Commonwealth National Reserve System
NTG	Northern Territory Government
PWCNT	Parks and Wildlife Commission of the Northern Territory
Ŋapaki	Person not of Aboriginal descent
RTA-Gove	Rio Tinto Alcan mining company

Notes on Yolŋu orthography

The Plan of Management seeks to conform to the current Yolŋu (Aboriginal) orthography.

Yolŋu words contain a number of letters and combinations that will be unfamiliar to many people reading this document. The following notes are intended to assist newcomers to the Yolŋu language in the correct pronunciation of these words.

ŋ - pronounced like the 'ng' in ring

ng - pronounce the 'n' and the 'g' separately

th, nh, dh - don't pronounce the 'h' but place the tip of the tongue between the front teeth to pronounce the 'd', 't' or 'n'

r, d̲, n̲, ', t̲ pronounced with the tip of the tongue backwards toward the roof of the mouth

rr pronounced by rolling the 'r' or allowing the tongue to flap during pronunciation

ny don't pronounce the 'y', but place the tip of the tongue behind the bottom teeth to pronounce the 'n'

dj, tj don't pronounce the 'j', and pronounce the 'd' or 't' with the tongue in the same position as for 'ny' above

ä (long) pronounced like the 'a' in father

a (short) pronounced like the 'o' in mother

e (long) pronounced like the 'ee' in meet

i (short) pronounced like the 'i' in hit

o (long) pronounced like the "aw' in dawn

u (short) pronounced like the 'u' in put

INTRODUCTION

The Dhimurru Indigenous Area Cultural Heritage Management Plan (CHMP) is the final stage of a process initiated and guided by Yolŋu traditional owners and the Dhimurru Board. Dhimurru Aboriginal Corporation (Dhimurru) undertakes the identification, conservation, and sustainable management of Indigenous cultural heritage resources in the Gove Peninsula region with specific focus on the Dhimurru Indigenous Protected Area (Dhimurru IPA). The CHMP aims to significantly reduce the risk of harm to Indigenous cultural heritage places in the Dhimurru IPA through a range of conservation and management practices.

The IPA is a landscape of considerable cultural significance according to Indigenous customary law, developing tradition, history, and current practices. Management of the Dhimurru IPA is unique in that it balances Yolŋu practices with mainstream science to ensure the successful conservation and management of Indigenous cultural heritage values of the IPA. Although a number of activities outlined in this CHMP may not be considered traditional management strategies, successfully managing the Indigenous cultural heritage values of the IPA requires that Dhimurru employ a complex set of management strategies in its day to day operations.

Preparation of this document has been guided by the Australia ICOMOS Burra Charter process, which stipulates the sequence of investigations, decisions, and actions for cultural heritage management planning. It is thus produced in accordance with the Australia ICOMOS standard for cultural heritage management plans. The principles in this document are also informed by guidelines for undertaking planning with Indigenous communities that are outlined in *Ask First* (2002). Most importantly, the "Guiding Principles for Dhimurru IPA Management" (2008:11), discussed below, have been basic to the entire planning process.

Dhimurru Indigenous Protected Area

By the mid 1970s some 3500 mostly non-Aboriginal people had come to reside in Nhulunbuy, which made the approximately 1500 Yolŋu landowners a minority population (Dhimurru 1999:34) in the Miwatj region. Today the mining leases held by Rio Tinto Alcan-Gove (RTA-Gove) overlap sacred site areas such as, for example, Manydjarrarrŋa-Nanydjaka (Dhimurru 2000:27), which are within the Dhimurru IPA, and future mineral exploration remains a distinct possibility (Dhimurru 1999:38). Non-Aboriginal recreational use of such areas has emerged alongside the establishment of the township, and visitors to the Yolŋu estates within those areas have created ongoing concern for the clan caretakers, partly because recreational activities may threaten the ecological fabric of an area, and also because inappropriate use of religious sites becomes a likelihood (Dhimurru 1999:33, 35-36). These issues have prompted Yolŋu to adopt mainstream methods of caretaking country to complement their traditional systems of land care. The formation of the Dhimurru Aboriginal Corporation (then Dhimurru Land Management Aboriginal Corporation) was one response (Dhimurru 1999:36).

A further response was the establishment of an IPA and in its inclusion in the Commonwealth National Reserve System (NRS). The Gove Peninsula and portions of the surrounding area came to be managed under an IPA agreement declared in November 2000 by the various Yolŋu Traditional

Owner clans (see Figure 1). The Dhimurru IPA covers an area of 1,249 sq. km., which includes approximately 90 sq. km. of marine estate, and the declaration establishes Dhimurru as the management agency. Dhimurru also manages the local recreation areas through an access permit system.

In 2003 Dhimurru entered into an Agreement under Section 73 of the Northern Territory Parks and Wildlife Conservation Act. Signatories to the agreement include Dhimurru, the Northern Territory Government through its Department of Natural Resources, Environment, and the Arts, and the Commonwealth Government through its Department of Environment, Water Resources, Heritage and Arts. The Section 73 agreement spells out the relationship between these organisations, confirms Dhimurru's role as the traditional owners' preferred natural and cultural resource management agency, and establishes an Advisory Group to assist with management activities, planning, and prioritising. The Dhimurru Management Board is composed of Traditional Owners, and Dhimurru's operations are carried out by Yolŋu rangers and non-Yolŋu employees in a ratio and staff structure that maintains Yolŋu control. Appendix 2 sets out the program of specific actions required to manage risks to heritage places on the IPA.

The IPA Plan of Management has eight management objectives:

- Managing country and heritage protection
- Managing people on Yolŋu country
- Wildlife protection, management and research
- Sharing knowledge and public education
- Training and staff development
- Partnership with others
- Tourism and business development
- Monitoring, evaluation, and forward planning

The Dhimurru IPA contains a rich variety of tangible and intangible cultural heritage values embodied in features such as

- Sacred places (i.e., places significant according to Aboriginal tradition)
- Ancestral Yolŋu burial places
- Places with historical family associations
- Traditional natural resource use (i.e., use of traditional plant and animal resources)
- Places of significance resulting from the Macassan contact period
- Places of historic significance resulting from the Mission period
- Artefact assemblages consisting of stone and contact artefacts
- Shell middens illustrating changing responses to changing environments
- Ancient cultural deposits
- Grinding surfaces representing thousands of years of plant and pigment processing

Indigenous Cultural Heritage Management

A basic tenet of Yolŋu culture is that Yolŋu are inherently linked to their land and sea country. They are related to each other individually and clan by clan through the sacred myths of the bestowal of country. Individuals take the most important aspects of their identity from the spirit beings with whom they are linked through their mother's and father's country. A Yolŋu

man (Dhayirra Yunupingu 1992:17) expressed these values of Yolŋu heritage in the following way:

> *… the land has actually carried us here … In the minds of Yolŋu, this land is like our bodies, or the land represents ourselves, so for example, whenever a person will die, it will be this very land which will slowly wipe out all traces of the person, here in this very area, and this is so that we will somehow still be able to interact with that person's spirit properly … So we Yolŋu look over and care for this land, and so it rests on our heads, it comforts us, when we think sadly about our old people, and we remember the places where they used to gather together and the places where they have died … This is what they passed towards us, and this is why we educated those little ones, so that sometime they will educate their own little ones.*

Indigenous heritage, as acknowledged by The Australian Heritage Commission (2002:4),

> *is dynamic. It includes tangible and intangible expressions of culture that link generations of Indigenous people over time. Indigenous people express their cultural heritage through 'the person', their relationships with country, people, beliefs, knowledge, law, language, symbols, ways of living, sea, land and objects all of which arise from Indigenous spirituality.*

Indigenous cultural heritage management requires recognising that the environment is shaped by Indigenous culture and is thus a cultural landscape. The concept of cultural landscape has become accepted at all levels of heritage management, but the term cultural landscape is not new. Human geographer Carl Sauer (1925; republished in Leighly 1965:343) is credited with making the term widely known; he wrote that, "The cultural landscape is fashioned from a natural landscape by a cultural group. Culture is the agent, the natural area the medium, the landscape is the result". Cultural landscapes are defined by the World Heritage Committee (2005:83) as "distinct geographical areas of properties uniquely representing the combined work of nature and man". This concept has been developed as part of an international effort to reconcile "… one of the most pervasive dualisms in Western thought – that of nature and culture". (Pannell 2006:1)

Archaeologist McDonald (2005:172), recording the physical heritage resources of the Dampier Archipelago, argued that "the contiguous landscape approach, where multiple cultural features are present, is current best-practice … and recognises archaeological and cultural landscapes as an appropriate management scale". Where there are high densities of cultural materials, she adds, "there is no choice but to define management units beyond the level of the isolated site". With respect to the question about the location of special sites that should not be impacted by development, McDonald's (2005:174) answer was, "They could be just about anywhere on the Archipelago". The density of significant places so far identified within the area of the Dhimurru IPA makes the Dampier Archipelago findings relevant not only with respect to tangible heritage, but, even more importantly, to the intangible cultural values within the Dhimurru IPA. Accordingly the Dhimurru CHM Plan utilises the landscape approach to define an appropriate management plan for the Indigenous cultural values of the IPA.

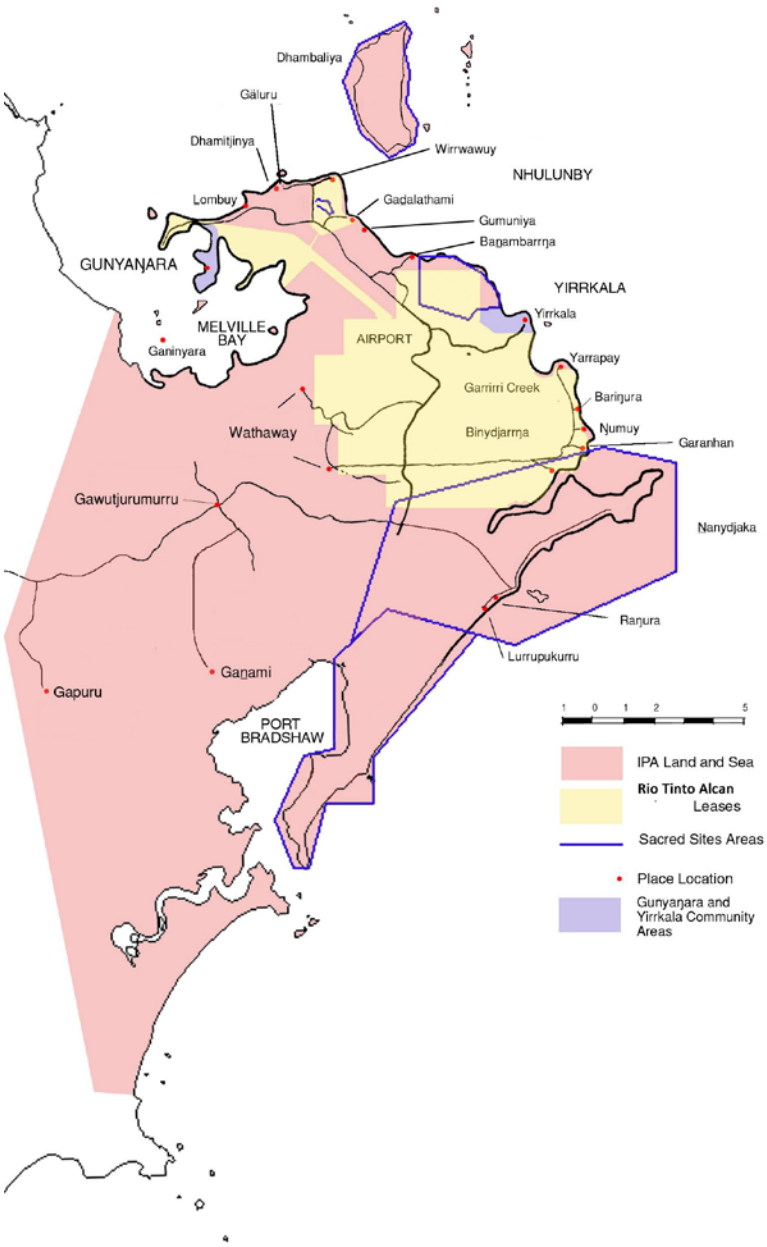

Figure 1 Dhimurru IPA

The CHMP for the Dhimurru IPA assumes that the IPA establishes the boundary of the relevant cultural landscape for the purposes of heritage management by Dhimurru while acknowledging that the IPA exists within a larger Yolŋu cultural landscape. The cultural heritage values within the IPA are for convenience dealt with as three broad categories, and management policies are linked to them. They are areas and places significant in Yolŋu tradition (sacred sites), areas and places of particular heritage value as the result of Macassan and other maritime activities, and areas and places of historical significance as the result of interactions with Missions and other external agents. These categories along with specific management

prescriptions are discussed in detail below in the section on **Heritage Management Principles**

The 1,249 sq. km. of the Dhimurru IPA include the Gove Peninsula, "that area of Arnhem Land east of a line drawn from the mouth of the Giddy River in Melville Bay to the mouth of Wonga Creek in Port Bradshaw" (NT Place Names Committee) an area to the west, an area to the south, and Bremer Island and surrounding islands to the north.

According to the AAPA (25 February 2009), 151 sacred sites have been documented within the IPA; 258.4 sq. km. are covered by registered sacred sites, and 41.34 sq. km. by sites for which registration has been requested. Approximately 25Ä of the IPA coastline falls within registered sacred site boundaries. The extent of sacred sites in the IPA, many of which are connected, is an indication of the importance of the region to Yolŋu traditional owners as well as the rationale for managing the IPA as a cultural landscape. Sacred sites are afforded protection under the Northern Territory *Aboriginal Sacred Sites Act* 1989. Sites of significance according to Aboriginal tradition are considered significant under this Act and are afforded protection whether they are registered or not.

The Northern Territory and Commonwealth governments have also acknowledged the significant Indigenous cultural heritage values of the IPA through other official instruments. For example, Wurrwurrwuy, a site associated with the era of Macassan visits to Arnhem Land, is inscribed on the Northern Territory Heritage Register under the Northern Territory *Heritage Conservation Act 1991*. This site is also under consideration for inclusion on the National Heritage List. Archaeological and Macassan sites are automatically assigned a high level of significance and are accordingly protected under the NT *Heritage Conservation Act 1991*.

The values of the IPA cultural landscape are discussed in additional detail below in the Section **Yolŋu Significance of the IPA.**

Resources

Dhimurru's management responsibilities, strategic plans, and management priorities in respect of the IPA and the section 73 Agreement are outlined in a Plan of Management endorsed by Yolŋu traditional owners. Dhimurru is responsible for the sustainable management of natural and cultural resources in Yolŋu terrestrial and marine estates within and adjacent to the Gove Peninsula, an area that includes the IPA. Dhimurru and Yolŋu custodians jointly undertake management activities. Particular focus is placed on the management of visitor access in designated recreation areas made available to the general public. Dhimurru provides a service to its members in assisting with and facilitating land and sea management initiatives. Yolŋu concerns are summarised in the Rules of the Corporation and form the basis of the section Objects and Powers.

Documents that inform the cultural heritage management plan include the following:

- Yolŋu Vision Statement in the Dhimurru Rules
- IPA Plan of Management 2008 to 2015
- Dhimurru Yolŋuwu Mo<u>n</u>uk Gapu Wänga: Sea Country Plan
- Manydjarrarrŋa-Nanydjaka NEGP Report
- IUCN Sacred Natural Sites: Guidelines for Protected Area Managers IUCN

Guiding principles for Dhimurru IPA management

- Yolŋu control and empowerment – Yolŋu make management decisions and activities should maximise opportunities for Yolŋu as active participants in the management of their country in the IPA
- Respect for Yolŋu values – there are extensive and all embracing values of all sites in the IPA for Yolŋu and the preservation of these sites is a primary focus of management
- Conservation and enhancement of natural and cultural values of the IPA – the use and management of the IPA must be sustainable and must protect the ecological and heritage values that are the result of generations of Yolŋu management.
- Both-ways management – maximising opportunities for Yolŋu to devise strategies through a mutual investigation of ŊapakiŊapaki and Yolŋu systems of knowledge
- Continued development of collaborative partnerships in programs and research to support sustainable use and management of Yolŋu land and seas. Cooperative and respectful partnerships with government and independent agencies will be sought by Dhimurru
- Ŋapaki recreation values – the goal of visitor management will be to encourage an appreciation of the cultural and natural values of the IPA by Ŋapaki, to promote an enjoyable experience and to ensure minimal environmental impact.

The following are guidelines for the management of places with significant Indigenous cultural heritage values endorsed by the Australian Heritage Commission (*Ask First* 2002:16):

- Restricting access by particular categories of people to some places to enable the maintenance of Indigenous customary law.
- Facilitating Indigenous access to places so ceremonies and other management practices can take place.
- Facilitating access to traditional resources may be important in its own right or may be necessary for maintaining other cultural activities (e.g. ceremonies).
- Monitoring sensitive Indigenous places to ensure visitors treat them with respect. This includes addressing direct and/or indirect negative impacts
- Recording and passing on stories about a place so that the next generation learns about its heritage value – i.e., intergenerational knowledge transfer.
- Keeping natural processes (for example, water flows) that are an integral part of the significance of a place.
- Cleaning country by removing rubbish, introduced plants and other foreign material from areas. This may also include burning areas of country.
- Monitoring earth disturbance to ensure past Indigenous camp sites are not disturbed.
- Painting at traditional art sites to ensure that law and tradition are maintained.

- Maintaining and using structures related to events in Indigenous peoples' history (for example, cemeteries, mission buildings, Indigenous settlements and sites of protest).

These guidelines are relevant to the management of Indigenous cultural heritage places within the Dhimurru IPA, and they are best achieved through Dhimurru's operations in managing the IPA.

Land Tenure

Type of land tenure has a high impact on the management and protection of cultural heritage places in the Northern Territory, in particular aspects of tenure defined in the *Aboriginal Land (Northern Territory) Rights Act* 1976. In the Miwatj region, land tenure and management are complex. The primary level of land tenure defines the Arnhem Aboriginal Land Trust, which encapsulates the Rio Tinto Alcan - Gove mining leases. Surrounding the area of the RTA Gove leases is the Dhimurru IPA. RTA-Gove is responsible for access and management within the mine lease and Nhulunbuy Township. The Northern Land Council and Dhimurru divide and share responsibility for access and management issues in the Aboriginal Land Trust and within the IPA area. The North East Arnhem Shire manages the local Aboriginal communities of Yirrkala and Gunyuŋara. Laynhapuy Homeland Association services the 22 outstations in the adjacent East Arnhem region. Aboriginal clan business and cultural interests are represented by the Gumatj Association and the Rirratjiŋu Association.

Environmental Setting

Environmental attributes of the general area are briefly described in this section to provide a context for the Yolŋu cultural landscape. The climate, geomorphology, geology, and vegetation of the IPA are significant factors for Indigenous land use and social patterns inscribed in the landscape. Contemporary changes in the landscape such as erosion and soil accretion and deposition may influence the visibility of cultural heritage places and have an impact on the heritage value of these places. Generally, the Gove Peninsula is characterised by the bauxite plateau country and the indented coastline consisting of a series of fine grained sandy beaches that mostly face northwards and southwards to the Arafura Sea.

Climate

The monsoon climate of northeast Arnhem Land follows a distinctive dry/wet cycle. The dry months, brought in by March winds from the southeast, extend from April through to October or November. During the dry months temperatures can drop to 17 degrees Celsius overnight. A shift in winds to the northwest brings thunderstorms with increasing frequency, and the start to the wet. From August onwards the average daily temperature is 34 degrees Celsius dropping to about 25 overnight. Torrential rain and regional cyclones are common during the wet season, and between January and March an average of 1150-1300 millimeters of rain falls. A few April showers complete the wet season. Annual rainfall variability is less than 0.75 (Data from the Australian Bureau of Meteorology; compiled by Keen 2004:6 and Tables 2.1 and 2.2).

Geology

Rawlings *et al.* (1997) have described the geology of the Gove Peninsula region in detail. The major geological occurrence in the area is bauxite.

Drimmie Head Granite and Bradshaw Complex also occur. Interspersed around the rocky outcrops and bauxite are occurrences of ferricrete and gravel, with sand, silt and clay. To the south west of the Gove Peninsula is the Yirrkala Formation, which is composed of fine to very coarse grain sandstone with rare chert pebbles and plant fossils. The coastline contains alluvial and Aeolian formations consisting of cheniers, sandy beach ridges, Aeolian dune fields, active creek channels, floodplains, and swamps.

Physiographic Groups

The physiographic characteristics of the region are divided into 3 main groups (Rawlings *et al.*1997). These divisions are the Coastal Plain, Gulf Fall, and Arafura Fall. The Coastal Plains consist of low relief and are divided into tidal flats, coastal sand dunes and undifferentiated. The region is dominated by the Mitchell Ranges in central Arnhem Land. Many of the region's rivers originate in these ranges.

Vegetation

Wilson *et al.* (1990) have classified three broad vegetation units within the Miwatj region:

- Vegetation Unit 4. The major vegetation unit for the region. Consists of *E. miniata* (Darwin Woolly Butt), *E. tetrodonta* (Stringybark) open forest with Sorghum grassland understorey.
- Vegetation Unit 9. This vegetation unit is found along the coastal areas in the region. Consists of *E. tetrodonta* (Stringybark), *E. miniata* (Darwin Woolly Butt), *E. bleeseri* (Smooth-stemmed Bloodwood) woodland with Sorghum grassland understorey.
- Vegetation Unit 102. This vegetation unit is known as the Coastal Dune Complex. It is found on the dunes to the south east of Nhulunbuy and consists of a wide variety of vegetation types. These include *Casuarina equisetifolia* woodland, monsoon vine-thickets, mixed grasslands, Melaleuca or grassland swamps, and mixed shrublands.

HERITAGE MANAGEMENT PRINCIPLES

Defining Indigenous Cultural Heritage

Indigenous cultural heritage places can be represented and identified in many different ways. The major categories of Indigenous cultural heritage are places of cultural significance according to Aboriginal tradition, archaeological sites, and places of general historic heritage. These site classifications are not mutually exclusive and are known to occur in conjunction with each other.

Places of significance according to Aboriginal tradition in the Northern Territory are known as Sacred Sites. The term sacred site is used inclusively to refer to any place that is of significance according to Aboriginal tradition. A more specific definition may relate to Aboriginal cosmology and its doctrines and involve an original or creation period. In many instances mythological and creation places become physically and psychologically dangerous to approach. This leads to sub-sets of sacred sites, which may be known as dreaming places, dreaming tracks, or dangerous places.

Archaeological Indigenous heritage places usually comprise places such as stone artefact scatters, rockshelter occupation sites, rock art sites, shell middens, stone arrangements, mounds, and stone tool quarries. Other places of Indigenous cultural significance include places that have indigenous cultural heritage values such as places of historical importance or note, homes, camping and hunting places, burials, and the like.

Australian heritage management authority originates in two principal sources, State or Territory and Commonwealth heritage legislation, and the ethics and principles established by the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (hereafter referred to as the Burra Charter). The legislative basis for the protection and conservation of Indigenous archaeological places and objects is discussed below in the section on legislative obligations. The following sources guide the assessment, management, and conservation of Indigenous cultural heritage places and objects in the Northern Territory:

1. The Australia ICOMOS Burra Charter
2. *Ask First: A guide to respecting Indigenous heritage places and values (2002)*
3. IUCN Guide to managing sacred natural sites in conservation areas
4. Commonwealth and Northern Territory heritage legislation

Burra Charter

Relevant definitions in the Burra Charter (Maquis-Kyle and Walker 1992:69) are listed below:

- **Place** means site, area, building or other work, group of buildings or other associated works together with associated contents and surrounds.
- Cultural Significance means aesthetic, historic, scientific, or social value for past, present or future generations.
- **Fabric** means all the physical material of the place.
- **Conservation** means all the processes of looking after a place so as to retain its cultural significance.
- **Restoration** means returning the EXISTING fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

- **Reconstruction** means returning a place to a known earlier state and is distinguished from restoration by the introduction of new materials (new or old) into the fabric. This is not to be confused with either recreation or conjectural reconstruction, which are outside the scope of this Charter.

Following definition of these terms, the Burra Charter (Maquis-Kyle and Walker 1992:69) sets out relevant conservation principles. Article 2 declares "*'The aim of conservation is to retain the cultural significance of a place'* and must include provision for its security, its maintenance and its future." The principles that are set out in the Burra Charter guide and inform the assessment of significance of a place. As noted above, Cultural Significance means aesthetic, historic, scientific, or social value for past, present or future generations. Significance assessments are a helpful tool in the management of cultural heritage resources through allowing managers to make informed decisions especially in land use issues. Definitions of these concepts of significance are (Maquis-Kyle and Walker 1992:73):

- Aesthetic Value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture, and material of the fabric, including the smells and sounds associated with the place and its use.
- Historic Value encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms in this section of the Burra Charter. A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase, or activity.
- Scientific Value or research potential of a place will depend on the importance of the data involved, on its rarity, quality, or representativeness, and on the degree to which the place may contribute further substantial information.
- Social Value embraces the qualities for which a place has become a focus of spiritual, political, national, or other cultural sentiment for a majority or minority group.

These values can be applied to the assessment of significance of cultural heritage places. The recommendations in the CHMP follow the principles of heritage place management that are described in the Burra Charter.

Ask First: A guide to respecting Indigenous heritage places and values

Ask First (2002) was commissioned by the Australian Heritage Commission to help Australians protect different aspects of their natural and cultural heritage places, and is intended to be complementary to the Australia ICOMOS Burra Charter and the Australian Natural Heritage Charter. According to the Australian Heritage Council, *Ask First* is a practical guide for land developers, land users and managers, cultural heritage professionals and others who may have an impact on Indigenous heritage. The main focus of the guidelines is to emphasise that consultation and negotiation with Indigenous stakeholders is the best means of addressing Indigenous heritage issues. The guidelines also emphasise the need to comply with relevant Territory and Commonwealth Indigenous cultural heritage legislation and statutory authorities.

Ask First states that in recognising the rights and interests of Indigenous peoples in their heritage, all parties concerned with identifying, conserving

and managing this heritage should acknowledge, accept and act on the principles that Indigenous people:

- are the primary source of information on the value of their heritage and how it is best conserved;
- must have an active role in any Indigenous heritage planning process;
- must have input into primary decision-making in relation to Indigenous heritage so that they can continue to fulfil their obligations towards this heritage; and
- must control intellectual property and other information relating specifically to their heritage, as this may be an integral aspect of its heritage value.

In identifying and managing this heritage:

- uncertainty about Indigenous heritage values at a place should not be used to justify activities that might damage or desecrate this heritage;
- all parties having relevant interests should be consulted on Indigenous heritage matters; and
- the process and outcomes of Indigenous heritage planning must abide by customary law, relevant Commonwealth and State/Territory laws, relevant International treaties and covenants and any other legally binding agreements.

Adhering to cultural restrictions on information about an Indigenous heritage place is essential to maintaining its heritage value. The consultation and negotiation process is divided into three major stages: Initial Consultation; Identifying Indigenous Heritage Places and Values; and Managing Indigenous Heritage Places.

IUCN Sacred Natural Sites: Guidelines for Protected Area Managers

The IUCN (2008) recently published *Sacred Natural Sites; Guidelines for Protected Area Managers*, which offers a comprehensive checklist for the appropriate management of sacred sites. The guidelines have six major principles, expanded by a series of specific guidelines. The major principles are:

- Principle 1: Recognise sacred natural sites already located in protected areas
- Principle 2: Integrate sacred natural sites located in protected areas into planning process and management programs.
- Principle 3: Promote stakeholder consent, participation, inclusion, and collaboration.
- Principle 4: Encourage improved knowledge and understanding of sacred natural sites
- Principle 5: Protect sacred natural sites while providing appropriate management access and use.
- Principle 6: Respect the rights of sacred natural site custodians within an appropriate framework of national policy.

Dhimurru's constitutional arrangements and organizational structure insure that Dhimurru operates according to these principles. The development of this cultural heritage management plan is consistent with these principles.

Cultural Heritage Legislative Obligations

Cultural resource management in Australia largely relies on implementation of heritage legislation in place at local, state, and national level. Australia has three main forms of cultural heritage legislation – for *relic*, *cultural*, and *general heritage* (Ritchie 1994:229). Relic legislation is designed to protect pre-contact Aboriginal sites or Aboriginal cultural relics, cultural legislation is designed to protect sites that are of contemporary importance to Aboriginal groups, and general heritage legislation is designed to protect heritage places that are not necessarily Aboriginal sacred sites. Generally management and conservation of a heritage place require funding that is dependent on relevant State, Territory, or Commonwealth heritage agencies, which in turn rely on assessments of heritage significance as defined by legislation. On the other hand, there are trends for cultural resource management to occur outside the bounds of heritage authorities as Indigenous people gain ownership and control of land through land rights legislation, joint management agreements, and Indigenous Protected Areas.

Cultural heritage in the Northern Territory is protected by means of several legislative mechanisms, and protected cultural heritage places may be divided into three main categories: Indigenous sacred sites, Indigenous archaeological places and objects, and general cultural heritage places. The table below outlines legislation that is relevant to cultural heritage places located in the Gove Peninsula area. Unlike the states, cultural heritage protection and conservation in the Northern Territory is governed only at a Territory and Commonwealth level. Local government in the Northern Territory does not have a legislative basis to implement protection orders on cultural heritage places.

This section attempts to clarify the complexities associated with the roles and responsibilities of the various resource management and cultural heritage regulatory authorities relevant to the Dhimurru IPA. It discusses the roles and decision making processes of the major regulatory authorities in relation to the cultural heritage and Aboriginal community and resource management in the Miwatj region.

Table 1. Legislative basis for protection of Cultural heritage places in the Northern Territory

Type of Cultural Heritage Place	Relevant Legislation	Regulatory Organisations
Sites of significance according to Aboriginal Tradition (sacred sites)	Northern Territory Aboriginal Sacred Sites Act 1989 Aboriginal Land Rights Act (Northern Territory) 1976 Aboriginal and Torres Strait Islander Heritage Protection Act 1984	Aboriginal Areas Protection Authority Northern Land Council Department of Environment, Water Heritage and the Arts
Indigenous archaeological places and objects	NT Heritage Conservation Act 1991	Department of Natural Resources, Environment and the Arts – Heritage Advisory Council
General Heritage Places	NT Heritage Conservation Act 1991 EPBC Act 1999 & Heritage Amendments	Department of Natural Resources, Environment and the Arts – Heritage Advisory Council

		Department of Environment, Water, Heritage, and the Arts

Northern Territory Heritage Conservation Act 1991

The Northern Territory Heritage Conservation Act 1991 (HCA) provides a mechanism to conserve a range of cultural heritage entities in the Northern Territory. Currently the agency responsible for the administration of this Act is Heritage Conservation Services, Department of Natural Resources, Environment and the Arts (NRETA). The Act provides for the creation of a Heritage Advisory Council (HAC). The HAC assesses and recommends to the Minister for the Environment places for inclusion on the Northern Territory Heritage Register. The Department of Natural Resources, Environment, and the Arts plays a major role in promoting heritage conservation in the NT and maintains the Northern Territory Heritage Register. The HCA provides legislative protection for declared heritage places in the Northern Territory. The HCA also provides for the nomination and declaration of places and objects as 'Heritage Places' if they are significant to the Northern Territory. Specific criteria, discussed below, are to be applied to such places to assess whether they meet a sufficient level of heritage significance.

Indigenous archaeological sites are protected under the HCA as 'archaeological places and objects'. The HCA also has a provision that protects sacred objects. As both sites and objects are afforded automatic protection under the HCA, NRETA is the primary statutory agency with responsibility for the conservation and protection of these sites.

Section 4 of the HCA provides the following definitions of what constitutes Aboriginal and Macassan archaeological cultural heritage:

> *"archaeological object" means a relic pertaining to the past occupation by Aboriginal or Macassan people of any part of Australia which is now in the Northern Territory, being –*
>
> - *an artefact or thing of any material given shape by man;*
> - *a natural portable object of any material sacred according to Aboriginal tradition;*
> - *human or animal skeletal remains; or*
> - *such objects, or objects of a class of objects, as are prescribed*
> - *but does not include an artefact made for the purposes of sale or an object, or objects of a class of objects, excluded by the Regulations from the ambit of this definition;*
>
> *"archaeological place" means a place pertaining to the past occupation by Aboriginal or Macassan people that has been modified by the activity of such people and in or on which the evidence of such activity exists, and includes such places, or place of a class of places, as are prescribed, but does not include a place, or a place of a class of places, excluded by the Regulations from the ambit of this definition;"*

According to the HCA, Indigenous cultural heritage places should be assessed according to Regulation 5 of the Act. The most relevant Heritage Assessment Criteria of such a place are established:

- by virtue of its association with events, developments or cultural phases in human occupation and evolution;

- by providing information contributing to a broader understanding of the history of human occupation;
- in demonstrating a way of life, custom, process, land use, function or design no longer practiced, in danger of being lost or of exceptional interest;
- in demonstrating the principal characteristics of the range of human activities which take or have taken place in the Territory, including ways of life, customs, processes, land uses, functions, designs or techniques; or
- in being highly valued by a community for religious, spiritual, symbolic, cultural, educational or social associations.

After privately owned land has been declared a heritage place, the owner has an opportunity to negotiate with the Director of the HAC and enter into a Heritage Agreement in relation to the place. The Agreement spells out the boundaries of the owner's rights to develop and use the land. Owners are liable to serious penalties for breaching the terms of a Heritage Agreement. In the absence of a Heritage Agreement, potentially any activity by the owner within the declared place could constitute an offence against the Act and render the owner liable to pecuniary penalties and/or imprisonment.

The Act provides for the appointment of Heritage Officers to administer and enforce the provisions of the Act. Under s.45 a Heritage Officer who is satisfied that there are reasonable grounds to suspect an offence against the Act has been or is being committed can, without warrant, enter with reasonable force any place in or on which the Heritage Officer believes there is evidence related to that offence, to search it and can also take other reasonable action to prevent the commission of an offence. The only exception to these powers is in relation to premises that are principally residential premises.

Offences against the Act may include carrying out work of any sort, or altering, or removing a heritage object or an object from a heritage place (without the Minister's written consent). Serious penalties are associated with offences committed under the Act. For example, s.33 provides that persons carrying out work on, damaging, desecrating or altering a heritage place are liable to fines of up to $10,000 or 12 months imprisonment.

Environment Protection and Biodiversity (EPBC) Act 1999

In July 2000 the Commonwealth Government promulgated the Environment Protection and Biodiversity Conservation Act (EPBC Act).It replaced a number of related environmental Acts (Environment Australia 1999). The EPBC Act is primarily concerned with the protection and conservation of those aspects of national environmental significance. The Act consolidates into one statute most of the Commonwealth's responsibilities for the environment. The Act has three major sections: environmental assessment and control, biodiversity conservation, and enforcement and administration. The EPBC Act outlines a process of referral for environmental assessment and approval. This is meant to ensure that "actions which are likely to have a significant impact on a matter of national environmental significance are subject to a rigorous assessment and approval process" (Environment Australia 1999:4).

The Act also provides for the protection and management of protected areas, including Commonwealth reserves (national parks), World Heritage Properties, Ramsar wetlands, and biosphere reserves. Enforcement and

administration provisions establish several advisory committees, reporting mechanisms on the state of the environment, environmental audits and powers to remedy environmental damage caused by a contravention of the Act.

As of the 1st January 2004, a new Commonwealth heritage regime came into effect. Amendments to the EPBC Act have replaced the former Australian Heritage Commission Act 1975. Key features of the heritage amendments to the EPBC Act are

- The creation of National Heritage List.
- The creation of a Commonwealth Heritage List.
- The creation of a new advisory body, the Australian Heritage Council.
- The retention of the Register of the National Estate as a sites database.
- Increased protection for places on the Register of the National Estate.

The legislation prescribes the criteria for listing National Heritage places and Commonwealth heritage places, and management principles for National Heritage and Commonwealth Heritage places. The Heritage Division of Department of Environment, Water, Heritage, and the Arts is the Commonwealth agency responsible for the administration of the EPBC Act and providing support to the Australian Heritage Council. The Australian Heritage Council is to be supported by an Indigenous Heritage Committee to advise the Council on sites of Aboriginal significance. The new Commonwealth heritage regime has created two new heritage registers; according to the Department of Environment, Water, Heritage, and the Arts, although the Register of the National Estate no longer exists as such, it is retained as a data base under the Australian Heritage Council Act 2003.

Northern Territory Sacred Sites Act 1989

The Aboriginal Areas Protection Authority (AAPA) administers the Northern Territory Aboriginal Sacred Sites Act 1989 (referred to here as the Sacred Sites Act), the aim of which is the protection and prevention of desecration of sacred sites in the Northern Territory (AAPA 2004). A sacred site is defined by the Act as a site of significance according to Aboriginal tradition. Tradition is defined as spiritual beliefs and customs of Aboriginal people and does not generally include practices arising from traditional camping and living places, historic places, Indigenous archaeological sites, or hunting and gathering activities.

The AAPA maintains a register of sacred sites. Included in the Sacred Sites Act is the provision of a clearance mechanism for Government and industry through a Site Registration and Authority Certificate process. The AAPA consists of a Board composed of Indigenous community members, which decides whether sacred sites meet a registration test. The functions of the Act, such as preparation of site registration reports and Authority Certificate assessments, are undertaken by Authority staff. Assessment for an Authority Certificate is undertaken by anthropological staff members of the Authority in consultation with Aboriginal Custodians. The Authority consults with Aboriginal Custodians only in relation to sacred sites as defined by the Act.

Sacred sites are afforded a blanket form of protection under the Sacred Sites Act whether they are registered or not. However a sacred site that has the status of an AAPA 'recorded site', or is recorded in the course of a development assessment, must meet the formal registration standards applied by the Aboriginal Areas Protection Authority Board.

Aboriginal Land Rights Act (Northern Territory) 1976.

The Aboriginal Land Rights Act (Northern Territory) 1976 (ALRA) establishes the role of Aboriginal Land Councils in the Northern Territory. The Act also establishes protective measures for sacred sites within Aboriginal Land Trusts. ALRA cannot protect sites outside Aboriginal Land Trusts. This is the Act that is most applicable to the Dhimurru IPA, since the IPA is situated within the Arnhem Land Aboriginal Land Trust and is therefore governed by the provisions of the ALRA. The ALRA stipulates that Land Councils must maintain a 'Land Information Register' (LIR). This register holds information pertaining to Traditional Ownership, sacred sites, traditional land use and related matters. This register is not available for public searches. Only the AAPA sacred site register has the legislative authority to make registered sacred site locations available to the public. Accordingly it is important to consider that there may be many more culturally significant sites recorded in the Gove Peninsula region than those that are currently on the public record. The definition of Aboriginal tradition for the purposes of ALRA includes spiritual beliefs and customs of Aboriginal people and, more broadly, culturally significant sites that are associated with practices arising from traditional camping and living places, historic places, Indigenous archaeological sites, or hunting and gathering activities.

Aboriginal and Torres Strait Islander Heritage Protection Act 1984.

The aim of the Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984 is "to preserve and protect places, areas and objects of particular significance to Aboriginals, and for related purposes." Its purposes are:

> *... The preservation and protection from injury or desecration of areas and objects in Australia and in Australian waters, being areas and objects that are of particular significance to Aboriginals in accordance with Aboriginal tradition. (S4)*

The Act was intended for use as a last resort to protect Aboriginal heritage where state and Territory laws are ineffective or there is unwillingness to enforce them (Evatt 1996:5). Protection is provided indirectly by enabling the Minister to make short and long-term declarations to protect areas and objects of significance to Aboriginal people. These declarations are supported by a system of criminal penalties. There have been no referrals under the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 to the Commonwealth Government for any area within the Gove Peninsula. The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 does not maintain a heritage register.

DHIMURRU IPA INDIGENOUS CULTURAL HERITAGE RESOURCES

The IPA cultural landscape identified for management is outlined in Figure 1. The total area is 1,249 sq. km. including about 90 sq. km. of marine estate.

The IPA includes islands but excludes mining and town lease areas and the community areas of Yirrkala township and Gunyaŋara (Ski Beach) including all of Drimmie Head. Marine areas are adjacent to and/or include Wanuwuy (Cape Arnhem), Yalaŋbara (Port Bradshaw), Djuwalpawuy (Mount Dundas) and Dhambaliya (Bremer Island).

The table below lists the most popular recreation sites within the IPA, and the related management activities carried out by Dhimurru. Sites are managed through the permit system, access control, and permitted recreational uses.

Table 1 IPA Recreation areas and management activities

	MANAGEMENT ACTIVITIES								
	Permits		Access		Recreational Activities				
	General	Special	4WD on tracks	Trial bikes on tracks	Walking	Camping	Fishing	Nature walks	Facilities
Ganinyara (Granite Islands)	x	-	x	x	x	-	x	x	-
Lombuy (Crocodile Creek)	x	-	na	na	x	x	x	x	-
Dhamitjinya (East Woody Island)	x	-	na	na	x	x	x	x	-
Gäluru (East Woody Beach)	x	-	na	na	x	x	x	x	-
Wirrwawuy (Cape Wirawawoi)	x	-	na	na	x	x	x	x	-
Gadalathami (Town Beach)	x	-	na	na	x	x	x	x	-
Gumuniya (Buffalo Creek)	x	-	x	x	x	-	x	x	-
Banambarrŋa (Rainbow Cliff)	x	-	x	x	x	x	x	x	-
Garrirri Creek	x	-	x	x	x	x	x	x	-
Yarrapay (Rocky Point)	x	-	x	x	x	x	x	x	-
Bariŋura (Little Bondi Beach)	x	-	x	x	x	x	x	x	-
Ŋumuy (Turtle Beach)	x	-	x	x	x	x	x	x	-
Garanhan (Macassan Beach)	x	-	x	x	x	x	x	x	-
Binydjarrŋa (Daliwoi Bay)	x	-	x	x	x	x	x	x	-
Nanydjaka (Cape Arhnem)	x	x	x	-	x	x	x	x	-
Raŋura (Caves Beach)	x	x	x	-	x	x	x	x	-

Lurrupukurru (Oyster Beach)	x	x	x	-	x	x	x	x	-
Wathawuy (Latram River and Goanna Lagoon)	x	-	x	x	x	x	x	x	-
Gawutjurumurru (Giddy River/Rockhole)	x	-	x	x	x	x	x	x	-
Ganami (Wonga Creek)	x	x	x	x	x	x	x	x	-
Gapuru (Memorial Park)	x	x	x	x	x	x	x	x	-

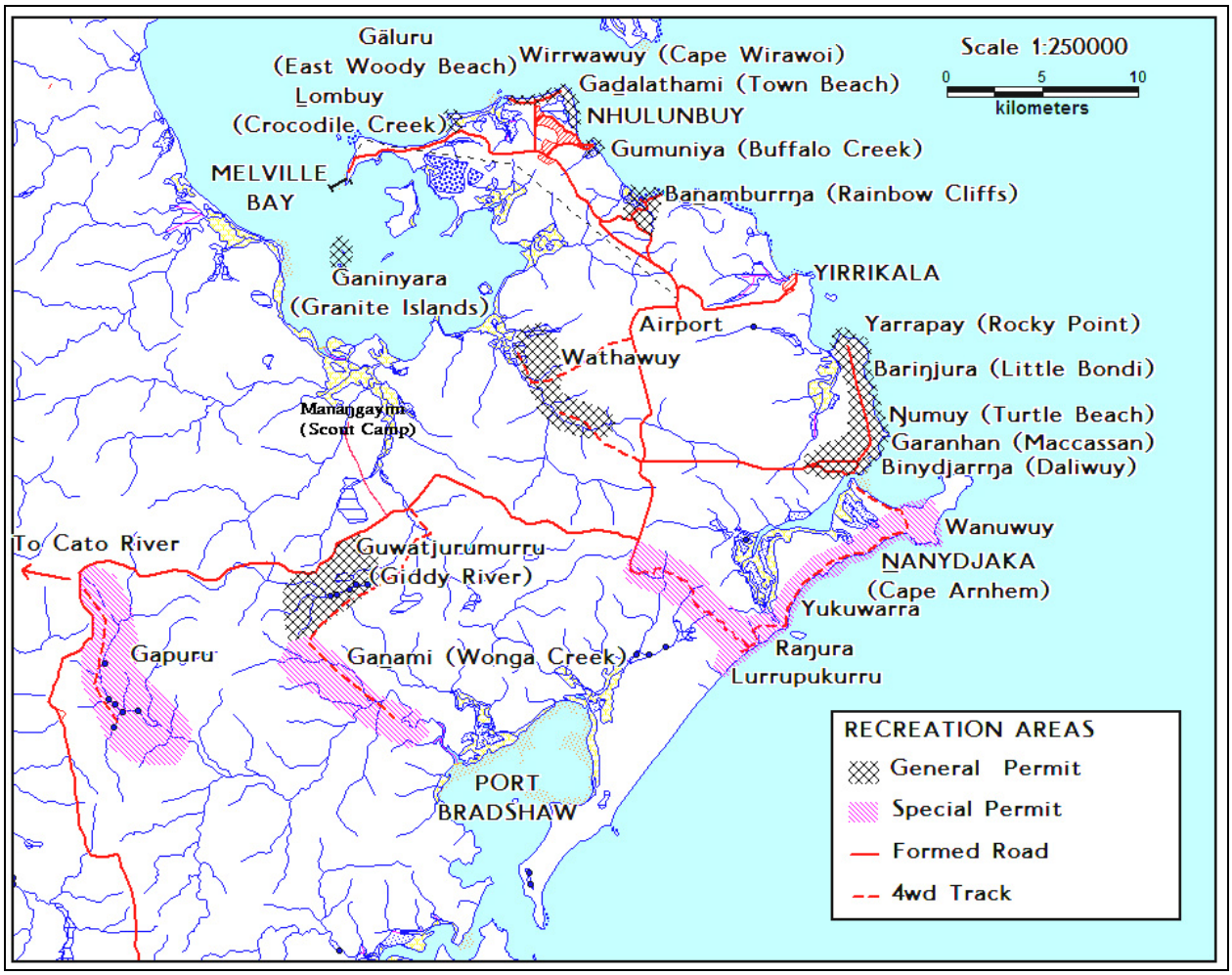

Figure 2 IPA Recreation Areas

Searches of the following cultural heritage registers were undertaken to identify any places that are nominated, under assessment or declared as having cultural heritage value under the Acts discussed in this section.

- Northern Territory Archaeological Database
- Northern Territory Heritage Register
- Former Register of the National Estate
- National Heritage List
- Commonwealth Heritage List
- Heritage Conservation Act 1991

Currently only one place, the Wurrwurrwuy Macassan Stone Pictures has been declared as a heritage place on the Northern Territory Heritage Register. This place was found to have cultural heritage significance under the Northern Territory HAC.

Places on the former Register of the National Estate (RNE) can still be searched by using the Australian Heritage Database. Six places from the Gove Peninsula region were entered on the RNE; they are listed below in Table 2. Five of these areas were recorded as Indicative Places for their natural environmental values. The Yalaŋbara Area was registered on the RNE for its natural and cultural heritage values.

Table 2 Places listed on the former Register of the National Estate[1]

Place	Status	Description	Location
Dalywoi (Daliwuy) Bay Monsoon Vine Forest	(Indicative Place)	The Dalywoi Bay Monsoon Vine Forest contains the largest example of Type One wet monsoon vine forest in the Northern Territory. It is an excellent example of the type and represents for twenty five percent of the known area of the type. The dry forest is one of few recorded localities within the Northern Territory of the rare climbing vine ZEHNERIA MUCRONATA, a species considered rare in Australia.	About 400ha, 13km south of Yirrkala, on Cape Arnhem, on the southern bank of an estuary that leads into Dalywoi Bay.
Mount Bonner Springs Jungle	(Indicative Place)	This relatively small forest patch is one of the five most floristically diverse examples recorded of a distinct floristic group (Group One) of monsoon rainforest, and as such is an excellent representative of this group. Mount Bonner Springs Jungle is one of only a seven recorded localities for the perennial sedge MAPANIA MACROCEPHALA, a species that is rare in the Northern Territory. The site is also one of only three locations for the climber IPOMOEA MAURITIANA, a species that is poorly known in the	About 40ha, 3km north-west of Mount Bonner and 26km west-north-west of Nhulunbuy.

		Northern Territory.	
Rindarry Jungles	(Indicative Place)	The upstream Rindarry Creek Jungle is the third largest recorded patch of Type Four wet monsoon vine forest. It is an excellent example of its type and represents twenty six percent of the total known area. It is the only recorded locality in the Northern Territory of the fern STICHERUS FLABELLATUS a species considered rare in the Northern Territory. The Rindarry Springs Jungle is the second largest recorded patch of Type Six wet monsoon jungle.	About 300ha, 20km south-west of Nhulunbuy within the Melville Bay area.
Rocky Bay Jungle	(Indicative Place)	Rocky Bay Jungle is floristically the most diverse jungle of its type (Floristic Type Nine) and is the fifth most diverse. It is the only recorded location for the evergreen tree INTSIA BIJUGA, a species considered rare in the Northern Territory. It is one of only a few known localities for the skink LERISTA STYLIS a species considered rare or insufficiently known.	About 300ha, on the sandy shores and adjacent hinterland of Rocky Bay about 3km south of Yirrkala.
Yalaŋbara Area Port Bradshaw Rd	(Registered)	Yalaŋbara is significant to the Yolŋu peoples of north-east Arnhem Land as a place highly valued by all Yolŋu people for its cultural, spiritual and religious significance. There are a total of 50 sites of cultural significance that have been identified in and around the general area of Yalaŋbara. These sites include exposed rock reefs, rocky islands, rock outcrops, sand hills and dunes, beach sites, trepang processing camp sites, fresh water creeks, caves and religious places.	About 21,000ha, 22km south-south-east of Yirrkala, at Port Bradshaw.
Yalaŋbara Monsoon Vine Forest	(Indicative Place)	The Yalaŋbara Monsoon Vine Forest is the fourth largest and floristically the most diverse example of this type of monsoon vine forest in the Northern Territory. Yalaŋbara Monsoon Vine Forest is an important representation of Type 1 wet monsoon vine forest.	About 150ha, 28km south of Nhulunbuy and 4km north-west of Port Bradshaw.

Yolŋu Sacred Sites

Owing to restricted access and secrecy provisions of the Sacred Sites Act, only certain information can be provided to the public: a statement of significance and the name of places that are registered sacred sites. The table below has been compiled from inspection of the register, other published sources, and from local informants and is indicative only. It is important to note that the sites shown in this table are a fraction of the total number in the IPA. A great deal of additional sacred site information is held by the Northern Land Council and the AAPA.

Table 3 Some Recorded and Registered Sacred Sites in the Gove Peninsula[2]

AAPA Site Number	Site Name	Status	Significance	Location
6273-7	Not Available	Recorded	Not Available	An area to the east of Rocky Point
6273-12	Not Available	Recorded	Not Available	East Woody Island
6273-13	Nhulun	Registered	A special dreaming place	Mt. Saunders located in the vicinity of Nhulunbuy
6273-14	Djawulpawuy	Registered	Culturally sensitive	Mt Dundas, and all land and coastline in the vicinity, located on the eastern side of the Gove Peninsula.
6273-15	Not available	Recorded	Not Available	A large granite outcrop located amongst blacksoil and paperbarks.
6273-17	Not Available	Recorded	Not Available	A large banyan tree located to the north from Mission Jetty
6273-18	Dimbuka	Recorded	Dreaming place	A number of large granite boulders near the south west side of Macassar Creek.
6273-31	Cape Arnhem	Registered	Large registered area containing numerous sacred sites of significance.	Cape Arnhem Peninsula, Dalywoi Bay and the land and sea in the immediate vicinity located 14km south of Yirrkala
6273-36	Not Available	Recorded	Not Available	A large open area located between the school and coastal foreshore north east from Yirrkala Community
6273-37	Not Available	Recorded	Not Available	An area identified as being between the water pump station and coastal foreshore north west from Yirrkala Community
6273-38	Not Available	Recorded	Not Available	An open area to the south from Yirrkala School
6273-124	Not Available	Recorded	Not Available	Area in the sea in the passage between Cape Wirawawoi (Wirrwawuy) and

[1] Compiled from various sources including inspection of AAPA Register

				Bremer Island
6273-132A & B	Gunyupinya Swamp	Registered	The place where ancestral women were making Merri string, when a flood occurred.	A large billabong located immediately to the west of Yirrkala. The site includes a spring that rises in a gully immediately to the east of the Yirrkala Road.
6273-133	Bukbukpuy	Recorded	Galpu dreaming site	Granite hill along foreshore in vicinity of RTA-Gove Refinery.
6273-134	Birridjimi	Not Registered	Banyan trees have high level of cultural significance.	Banyan tree located near where the conveyor belt crosses the road to the refinery
6273-135	Not Available	Recorded	Not Available	Banyan tree near the treatment plant offices on the RTA-Gove refinery site.

Indigenous and Macassan Archaeological Sites

Twenty-one archaeological places on the Gove Peninsula have been recorded. Figure 2 illustrates the location of previously recorded Indigenous and historic archaeological sites in that area. The majority of these sites are associated with the Macassan and Aboriginal contact period of history. The cultural significance of the Macassan sites is developed more fully below in **Macassan Connections.** The sites are all located on the coast. Table 4 lists the features that have been recorded at these sites.

Archaeological studies on the Gove Peninsula have been limited to Macknight's (1969, 1972, 1986) survey and recording of sites associated with the Macassan maritime industry, an early survey of the Gove peninsula area in the 1970, and recent surveys of the Rio Tinto Alcan Gove mine area bauxite plateau. The table below illustrates the frequency of archaeological site features that have been previously recorded in the Gove Peninsula region.

Table 4 List of previously recorded archaeological sites in the Nhulunbuy region[3]

Site ID	Site Name	Site Features	Recorder
62730001	Crosby site	Shell midden	Eleanor Crosby
62730002	Crosby site	Shell midden	Eleanor Crosby
62730003	Burwa	Stone Artefact Scatter, Shell midden, Stoneline	Eleanor Crosby
62730004	Crosby site	Shell midden	Eleanor Crosby
62730005	Crosby site	Shell midden	Eleanor Crosby
62730006	Crosby site	Shell midden	Eleanor

[2] Compiled from the NRETA Archaeological Site Database

			Crosby
62730007	Crosby site	Shell midden	Eleanor Crosby
62730008	Crosby site	Shell midden	Eleanor Crosby
62730009	Crosby site	Shell midden	Eleanor Crosby
62730010	Crosby site	Shell midden	Eleanor Crosby
62730011	Crosby site	Unrestricted Mythological site	Eleanor Crosby
62730012	23.b. Galuba	Stoneline, Smokehouse depression, Tamarind tree, Isolated nonstone artefacts	C. C. Macknight
62730013	23.b. Drimmie Head	Smokehouse depression, Isolated nonstone artefact	C. C. Macknight
62730014	23.c. Gunjangara	Stoneline, Smokehouse depression, Tamarind tree, Isolated nonstone artefact	C. C. Macknight
62730015	23.d. Drimmie Head	Stoneline, Pathway, Tamarind tree, Isolated nonstone artefact	C. C. Macknight
62730016	23.e. Drimmie Head Point	Tamarind tree, Isolated nonstone artefact	C. C. Macknight
62730017	23.f. Melville Bay	Tamarind tree, Isolated nonstone artefact	C. C. Macknight
62730018	24.d. Wurrawurrawoi	Stone arrangement other	C. C. Macknight
62730019	24.e. Dalywoi Bay	Stoneline, Isolated nonstone artefact	C. C. Macknight
62730022	Barramathawuy	Stoneline	Richard Baker
62730023	Ganinyara	Stoneline	Richard Baker

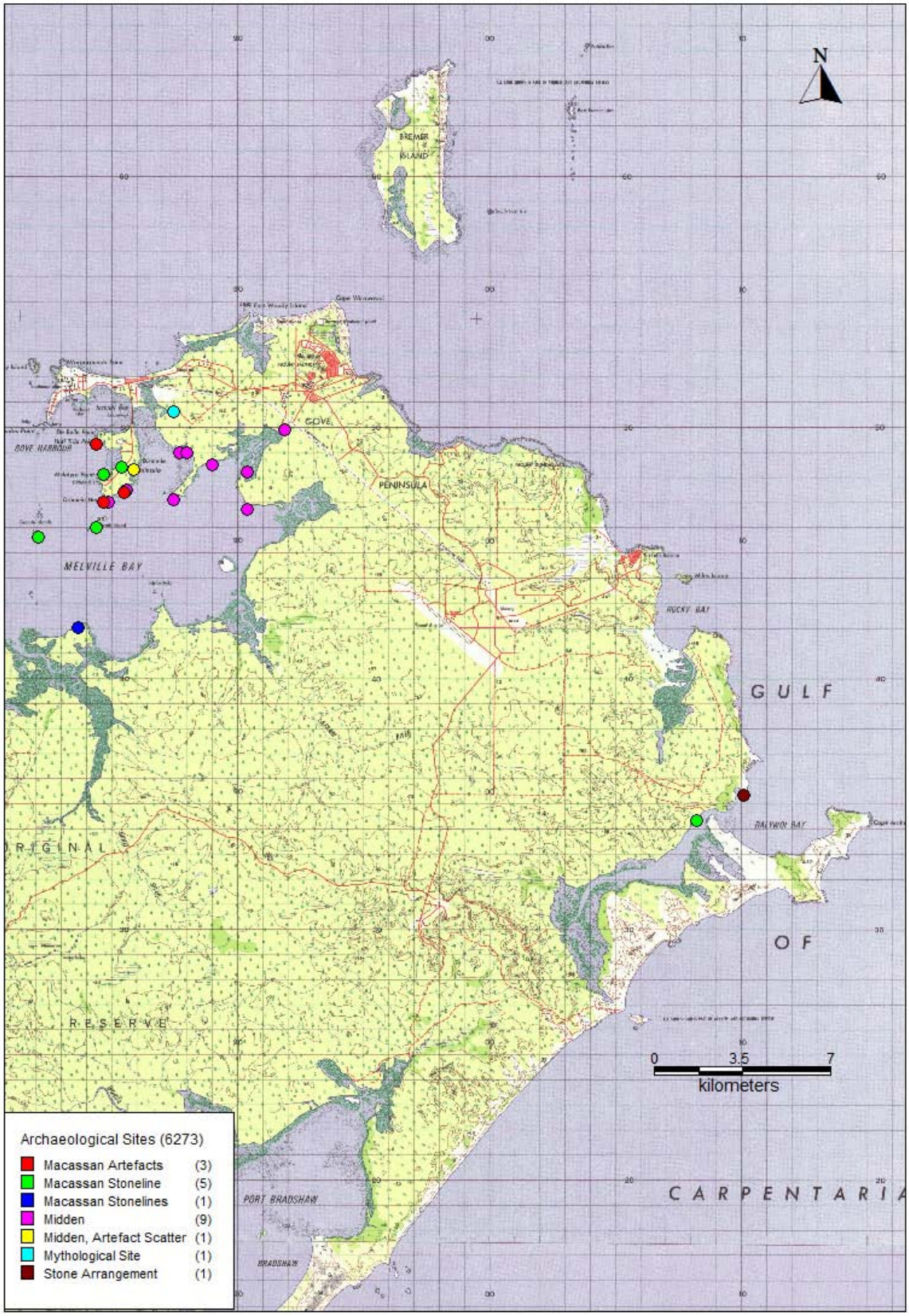

Figure 3 Archaeological sites in the IPA region

Macassan material and non-material culture influenced Indigenous society during the lengthy period of culture contact. While the date marking the

beginning of the Macassan trade with Aboriginal people along the Arnhem Land coast is still debated, many historians accept the period 1650 to 1720 as the probable time frame for its beginning (e.g., Macknight 1986: 69). However, substantial evidence for a much earlier date exists, perhaps as much as 800 years before the present. (Macknight 1986:70; Clarke 2000b:328).

Research in northeastern Arnhem Land by Warner (1958) in the 1920s and by Thomson (1949) in the 1930s produced evidence of extensive Yolŋu interaction and trade with Macassans, although the two men differed in their interpretation of Macassan influence on Yolŋu culture.

According to McIntosh (2006), the archaeological and mythological evidence points to ongoing visitation and exchange between the inhabitants of Arnhem Land and visitors from the Indonesian archipelago for a longer period than that indicated by European records. Whatever the date of their initial arrival, Europeans on the Arnhem coast from about 1606 began a process that disrupted and then finally ended the long term international trading links with the islands to the north.

Clarke (2000b:327) suggests that although historical accounts may be correct in dating the beginning of the trepang industry to the mid 17th Century, it is "…possible that earlier visits involved smaller numbers of people and ships, and a different range of commodities such as sandalwood, pearl shell and turtle shell…" that may have been sought by the Macassans or others.

As a result of her archaeological research on Groote Eylandt, Clarke (1994:456) identified a "landscape stratified according to a cultural definition of time". Clarke (1994:456) found three major temporal periods represented in the landscape, each characterised by unique material culture: the recent past, the Macassan period, and the pre-contact past (Clarke 1994). The Macassan period is beyond recent memory, but Groote Eylandters know many places visited by Macassans and they regard the time of the Macassan visits as a 'Golden Age' (Clarke 1994:456).

Chaloupka (1993:192) found evidence of Macassan visitation, interaction, and influence on the Aboriginal society and economy in western Arnhem Land. Chaloupka (1993:192) states that as "… payment, they received cloth, rice, tobacco and Dutch gin, and the treasured iron knives and tomahawks." As a result, "… shards of traded pottery, flakes from the thick green glass of Dutch gin bottles, and paintings depicting Macassan subjects" are all found as part of the archaeological record in western Arnhem Land (Chaloupka 1993:192). Chaloupka's study of the decorative elements of rock art, suggested that similarities to Indonesian weavings and textiles, such as "decorative hatching, diamond and lozenge designs as well as patterned parallel, horizontal and vertical blocks found in the rock art could be based on such fabrics." Apart from Chaloupka's (1993) publication, there has been little exploration of the hypothesis regarding the decorative elements of rock art.

It has recently been proposed that the Macassan influence affected the local Arnhem Land Indigenous economy to drastically change the presence and absence of foreign stone tool raw materials in the archaeological assemblages on the Coburg Peninsula (Mitchell 1996: 2000). Mitchell suggests that this is an indicator of increased trade and exchange after Macassan trade goods entered the traditional Aboriginal economy.

It is difficult to draw a distinct boundary between 'Macassan' and 'Indigenous' cultural heritage places where evidence of both is found, since Macassans and Yolŋu have a 'shared heritage' in such places. Further complicating this distinction are places where material culture representing Macassan, European, and Yolŋu culture are found in the same site.

Shell middens are the most frequently occurring archaeological site feature in the Gove Peninsula region, and all recorded shell middens are located within Melville Bay. Further details regarding these shell midden sites, e.g., size, content, and species distribution, are not available owing to the absence of the original report from government records. However, Davis (1985:80) lists shellfish species consumed by Yolŋu "in northern Arnhem Land", which can be used to infer species utilised in the Gove Peninsula region. It is likely that shell middens and scatters on the Gove Peninsula occur in physical contexts and densities similar to those documented by Clarke (1994) on Groote Eylandt, given the similarities in environmental and social contexts.

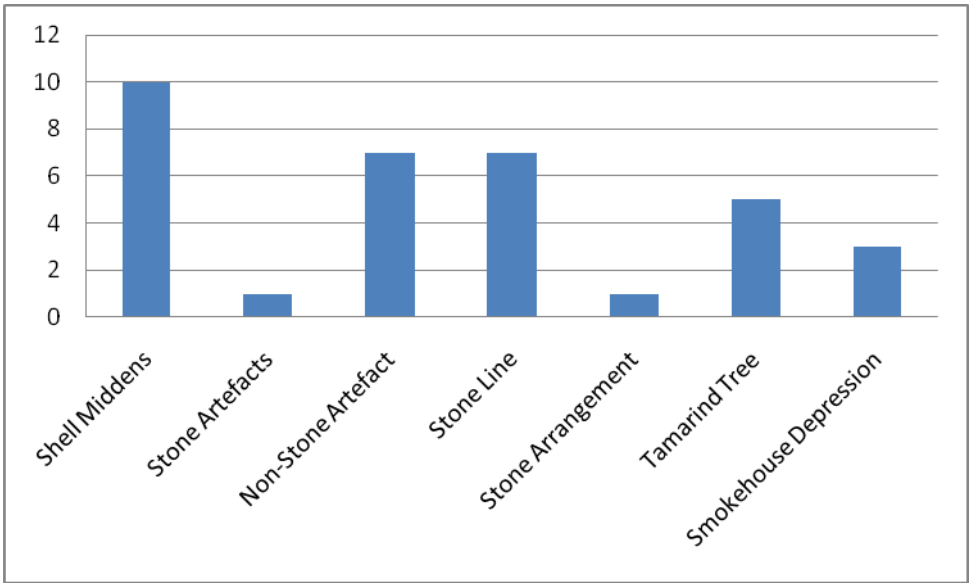

Figure 4 Frequency of archaeological site features represented on previously recorded archaeological sites in the Gove Peninsula area (nṯ21)[4]

Although the Yolŋu have a rich material culture, much of it is made from floral and faunal resources that do not preserve well in the archaeological record. Keen (2004:362-368) summarises the extensive material culture record that was documented by researchers such as Warner, Thomson, and Berndt. Spears from the famous Ŋilipidji quarry were traded extensively amongst and between Yolŋu clans. However, the Ŋilipidji quarry is some 150km west of the Gove Peninsula, and it is unlikely that evidence of any reduction sequence associated with quartzite blade production will be found on the Gove Peninsula.

Stone artefacts do not appear to be highly represented or visible within the Gove Peninsula archaeological record, and suitable conchoidally fracturing stone raw material sources do not exist in the Gove Peninsula region. A large proportion of the Gove Peninsula is formed by the homogenous

[4] Source NRETA Archaeological Site Database

bauxite plateau surrounded by granite intrusions and sandstone, all of which contain very limited conchoidally fracturing stone. The nearest possible source of quartzite or silicified sandstone is some distance (150km to the west). Granite sources that outcrop in the area contain very little quartz pegmatite that would be suitable for the manufacture of stone tools.

The most visible and currently most threatened evidence of the Macassan era throughout north-east Arnhem Land is located at Wurrwurrwuy, where stone arrangements consist of a number of "pictures" that depict Macassan boats, houses, and other elements of their material culture, represented in outline form by small to medium laterite rocks. Locally referred to as "stone pictures", these stone arrangements were probably made at the end of the 19th century.

South Australia annexed the Northern Territory in 1863, and by the 1880s increasingly enforced licensing and customs duty on the trepangers. The Northern Territory Administrator closed the coast to Macassans in 1906, and the annual visit of Macassan trepangers ended in 1907.

Yolŋu Historic Heritage

Notable Events of the Recent Past

1906	Australian borders closed to Macassan trepangers
1920s	Japanese trepanger presence on Arnhem coast
1935	Yirrkala Mission is established
1942-45	World War 2
1950s	Mining exploration begins on the Gove Peninsula
1960s	European Launch Development Organisation establishes base on Gove Peninsula
1960s	Mining begins at Gove

Japanese Pearling

In the 1920s Yolŋu people again began to trade with foreigners who were attracted to Arnhem Land trepang beds. During the 1920s fleets of sometimes fifty Japanese pearling boats carrying crews of up to 800 men worked northern shores in search of trepang and oyster (Dewar 1992:22,85). As with the Macassan trepangers, this more recent north coast industry was open to Yolŋu involvement. According to at least one report, Yolŋu women played a role and were engaged by the Japanese to assist in the recovery of oyster (Dewar 1992:44). Yolŋu trade interests included Japanese steel, alcohol and tobacco. However, unlike the cordial business relations maintained with the Macassans, Yolŋu relations with the Japanese were strained. Conflict reportedly arose from a combination of poor working conditions, exploitation of Yolŋu women, and resulted in confrontations, in one of which Yolŋu men killed a Japanese crewman(Dewar 1992:22,44).

Yirrkala Mission

Until the mid 1930s no permanent settlement by non-Yolŋu people had been established in the vicinity of the Gove Peninsula. This changed in November 1935 when the Methodist Overseas Mission officially opened Yirrkala Mission on the coast some 15kms east of Melville Bay (Dewar 1992:77; Dhimurru 1999:28). While these newcomers displayed some degree of tolerance for Yolŋu tradition, mission policy was to enforce a sedentary, agrarian economy on a hunter-gatherer way of life (Dewar 1992:77,86). The result for Yolŋu people was disastrous, and intergroup fighting and killings erupted between disparate East Arnhem Land groups (Dewar 1992:78). Anthropologist Donald Thomson (in Dewar 1992:81) wrote in a 1937 report to the Commonwealth Government,

> *It is no exaggeration to say that the great majority of the serious trouble of the people of Arnhem Land in recent years have(sic) been due directly or indirectly to the casual interference of intruders in the reserve … Rigid segregation in the Arnhem Land Reserve and protection from all outside contact with its destructive and disintegrating results, alone would preserve this population as a stable, self-respectiving (sic), self-supporting, primitive community.*

Dhimurru (1999:28) notes that during the time of mission presence at Yirrkala, resource rich areas such as Manydjarrarrŋa-Ŋanydjaka became places of refuge for Yolŋu. People maintained seasonal hunting and gathering there, and in at least one instance a group set up a period of permanent residency in the Manydjarrarrŋa-Ŋanydjaka area.

World War 2

During World War 2 the RAAF 8 Airfield Construction Squadron built a 7,500ft sealed runway on the Gove Peninsula near the Yirrkala Mission and a Catalina flying boat base at Drimmie Head to counter the threat of an invasion through the western approach to the Torres Strait. Gove airfield was named after a RAAF pilot killed in an accident over Milingimbi in 1943 (Callaghan 1988:unpaginated Introduction). Approximately 5000 Allied servicemen were stationed on the Gove Peninsula during the war (Wade-Marshall 1988:20). There were approximately 317 military aircraft crashes in the Northern Territory during World War 2, six of which were allied aircraft that crashed in the Gove Peninsula area after the airstrip was built. By the

time the strip was completed, however, the threat to Australia had diminished and so the strip was used as a staging area for sorties into Papua New Guinea and the laying of mines in the Arafura Sea. With the conclusion of the war in 1945, aircraft movements steadily declined and the decommissioning of 2 Operational Bomber Unit in March 1946 was followed by the departure of the last military aircraft.

The war years culminated in a number of significant shifts for Yolŋu people. As non-Aboriginal women and children were evacuated from Yolŋu country, a temporary military settlement was set up (Dhimurru 1999:28; Thornell 1986:105). The western products Yolŋu had become accustomed to were then in short supply and often not available (Thornell 1986:121-122). The Japanese had again returned to their shores but this time as an enemy presence, not as potential traders. The possibility of invasion in Thornell's (1986:119-121,141) account of this time was clearly threatening to Yolŋu people and some Yolŋu did lose family members (e.g., a Milingimbi crew lost on a shipping mission). Some 50 Yolŋu men were trained and served with Donald Thomson (Thomson 2003:194-229) as a Special Reconnaissance Unit during the early 1940s monitoring the coast and preparing for a possible Japanese invasion.

ELDO

During the 1960s the European Launcher Development Organisation Down Range Tracking Station (ELDO) was established approximately 10 kilometres south of the current Gove airfield. The function of ELDO was to track guided missiles launched from Woomera. ELDO was staffed by a number of Australian and European scientists, some of whom established friendly relations with Yolŋu.

MINING

By far the most profound external impact on Yolŋu people has come from mining. Morphy (1991:31) points out that until the 1950s northeast Arnhem Land was more or less protected from the outside world by its regional remoteness and difficult access. With the 1950s discovery of one of the world's largest bauxite reserves on the Gove Peninsula, the continuity of Yolŋu cultural life and land ownership were faced with their greatest challenge (Morphy 1991:31). Initial geological reconnaissance occurred in 1952, and special mining leases granted in 1958 and 1962. Nabalco, a consortium of Swiss and Australian firms, was formed in 1964 to mine the bauxite ore body (Kauffman 1998:42). In 1963 Yirrkala Yolŋu, under the threat of mining and in the absence of consultation, forwarded a bark petition to federal Parliament in Canberra to mark their concern (Dhimurru 1999:30). Despite the sympathetic Joint Parliamentary Committee enquiry and report that the petition sparked, an agreement between the Commonwealth and Nabalco was struck in 1968 (Dhimurru 1999:31; Morphy 1991:31). The effect of the agreement was unsuccessfully appealed by the Yolŋu people in the Northern Territory Supreme Court, and by 1973 the mining township of Nhulunbuy with a permanent population of non-Aboriginal residents had been established (Dhimurru 1999:32; Williams 1986:157-191). A Dhimurru (1999:30) report cites Mission Superintendent Wells' recollection of the time:

> *What neither the mission head office nor the Department of Welfare had counted as worthy of debate within the Aboriginal community was the relevance of the sharp theological implications inherent in the transfer of*

land containing totemic mythological significance for Aboriginal people. The taking of Aboriginal land by decree was none the less violent than taking it by physical force. The result was the same, and was implicit in the secrecy surrounding the negotiations which took place prior to the granting of the decree and without any consultation with the Aboriginal people.

Nabalco feasibility studies (for example, Gilbert 1973:235-244 and Wells 1982) contain no reference to consultation with the Yolŋu traditional owners regarding significant cultural heritage places. As a result, no contemporary base line data exist that could provide a basis for measuring the extent of the impact of mining activity on heritage places.

YOLŊU SIGNIFICANCE OF THE IPA

This section discusses Yolŋu values and the way they inform Dhimurru's management of the cultural heritage places located within the IPA. The area of Manydjarrarrŋa-Ŋanydjaka serves as an appropriate exemplar of the IPA based on the careful documentation of its resources and Dhimurru's management.

Caring for Manydarrarrnga-Ŋanydjaka

Palaeo-environmental evidence suggests that the Manydjarrarrŋa-Nanydjaka coastal region took its current shape place about 6,000 years ago when sea levels reached their present levels at the end of the last glacial period (Dhimurru 1999:19). Rising sea levels began after the last glacial maximum at a rate of approximately 30mm per year and ended around 6,000 years ago (Woodroffe 1993:165-166). Valleys were drowned and became harbours, while in other areas the processes of sedimentation maintained virtually constant wetlands or mangrove swamp environments during the later phases of the sea level rise (Chappell 1988:34). These palaeo-environmental changes are critical to forming the landscape that is important to Yolŋu and is managed today within the Dhimurru IPA.

Traditionally the owners of a large part of this region were the Lamamirri clan, and descendents of this group have significant spiritual connections with Manydjarrarrŋa-Ŋanydjaka country. Care-taking of the estate today lies with the Gumatj clan, who, through the mari-gutharra[5] relationship with Lamamirri people, had accepted responsibility when the clan's extinction was imminent (Dhimurru 1999:6; Yunupingu 2008). Historically, both the Lamamirri and Gumatj are landowners linked to Manydjarrarrŋa-Ŋanydjaka because of the bestowal of this land (and sea) on the groups by ancestral beings. Its significance, however, extends to other groups of the Yirritja moiety including the Wangurri , Maŋgalili and Gupapuyŋu clans, who own small areas and sites within the estate (Dhimurru 1999:25,13).

[5]*Mari-guthara relationships are kin relations between a mother's mother/daughter's children and a mother's mother's brother/sister's daughter's children. The label can be extended to clans and in the instance of the sister groups, the Lamamirri and the Gumatj, the Lamamirri were mari to a number of Gumatj patrilines (Williams1986:183). Williams (1986:182) explains that (by 1971 at least) the Lamamirri clan consisted of only two living women and because no men remained was in Yolngu terms considered effectively extinct. In this situation, the title of a clan can be passed "by succession to another patrilineal descent group through the provisions of the mari-gutharra relationship" (Williams1986:104).*

Patri-moieties: Dhuwa and Yirritja

The Gumatj clan belongs to the Yirritja moiety, on the basis of a social principle that allocates the Yolŋu people of northeast Arnhem Land into two named halves, one Yirritja and the other Dhuwa. During the ancestral formation period, Yirritja and Dhuwa ancestors moved across country creating the land known to Yolŋu today (Christie 2002:4). At this time everything - the cosmos, land and sea, natural features, people, animals and plants - became either Yirritja or Dhuwa. The moieties are patrilineal and individuals gain membership through their father's clan, which falls into one or the other moiety. Moieties are exogamous and people must marry into the opposite moiety (Keen 2004:168; Williams 1986:57). Dr Marika-Mununŋgiritj explains,

> *The first thing is that there are two moieties, Dhuwa and Yirritja. Everyone and everything is either Dhuwa or Yirritja. Yirritja people sing about Yirritja things, like Yirritja rocks, Yirritja winds, wildlife, clouds, ancestors, creators, and many things. A Yirritja person must always marry a Dhuwa person, and Dhuwa must marry Yirritja. You can't marry the same moiety. That's how the world works. It has been there for thousands of years. We live by that. If a man or woman is Dhuwa, their mother will be Yirritja. Also Dhuwa land can have another piece of land nearby which is its mother, Yirritja. For example the Gumatj land at Bawaka, which is Yirritja, is right next to its mother, the Rirratjiŋu homeland centre named Yalaŋbara, which is Dhuwa.*

Subsections

Sometime before the twentieth century Yolŋu people adopted a desert-derived subsection system, which articulates with their patri-moieties. The system acts as another mode of social organisation, and the names of the subsections may be used as terms of address as well as for ceremonial purposes and forming relationships with strangers (Keen 2004:168):

Dhuwa moiety

Balaŋ (m)/Bilinydjan (f)	white-breasted sea eagle
Wämut/Wämuttjan	black-breasted buzzard, 'black-nosed' kangaroo
Burralaŋ/Galiyan	agile wallaby/rock wallaby
Gamarraŋ/Gamanydjan	wedge-tailed eagle

Yirritja moiety

Ŋarritj/Ŋarritjan	antilopine wallaroo (garrtjambal), raw
Gadjak/Gutjan	chickenhawk, skink (gudutjurrk)
Baŋadi/Baŋaditjan	emu (wurrpan)
Bulany/Bulanydjan	antilopine wallaroo (garrtjambal) cooked.

Matha

Approximately forty related dialects are spoken in northeast Arhnem Land by groups totalling some 6000 people (F. Morphy *pers. comm.* February 2009). This group of related dialects is referred to as "Yolŋu Matha" (Yolŋu language or tongue), which belongs to the Pama Nyungan family of languages. Each dialect is understood by Yolŋu people as being either Yirritja or Dhuwa; each is named, regarded as a language and cultural entity with its own lands, totems, songs, sacred sites and religious responsibilities[6] (Christie 2002:5; Keen 2004:165).

Patri-groups

A language group is a distinct landowning group (patri-group or clan) whose lands were bestowed on it by waŋarr (totemic ancestors and ancestral beings) at the beginning of time. Sites on estates testify to the ancestor beings whose journeys and interrelations not only determined patri-group and estate identity but also linked various groups together within each moiety. Ancestral attributes distinguish groups from each other and also determine ceremonial and social responsibilities to the groups they are ancestrally linked to (Keen 2004:167). A Manydjarrarrŋa-Ŋanydjaka example of shared ancestrally derived responsibilities is told by a senior Gumatj elder (Dhimurru 1999:11) in connection to the spirit being, Ganbulabula, who is, in this instance, the unifying figure of some Yirritja clans:

[6] www.omniglot.com/writing/Yolŋu.php

Why do we all sing this land? Because the singing of Ganbulabula is from all of us, Gumatj, Dhalwaŋu, Maŋgalili, Madarrpa, Liyalanmirri, Ritharrŋu, Lamamirri, Wangurri, Warramiri, and Gupapuyŋu.

Lamamirri descendents and Gumatj people were bestowed land and sea parcels of Manydjarrarrŋa-Ŋanydjaka by the creator beings, Whale, Lightning Sea Snake, Stingray, Crocodile, and Dog, and another senior Gumatj elder, Yäma Munuŋgiritj (Dhimurru 1999:25), tells of some of the events:

There is the sea and the land, which Whale gave us, and he is there now. You can see where Whale has been where the water is spurted out and the rock where he left his image. Here the Lightning Snake too comes out and rests his head on the rock. He makes lightning and thunder and has given to us landowners a gift of special white clay. Whale creates for us shellfish and turtle at another place.

Divisions of ancestrally bestowed estates pattern northeast Arnhem Land and, as Keen (2004:167) and Williams (1986:78-79) point out, are well resourced packages often coupling coastal and inland economies. Dhimurru's (1999:14-20) report clearly illustrates the diversity of landforms and habitats in Manydjarrarrŋa-Ŋanydjaka, and shows how nearby archaeological evidence suggests that pre-contact Ŋanydjaka owners sourced foods from varying rich and abundant ecological zones. Fish, shellfish, crabs, swamp fowls, mammals, reptiles, tubers, spike rush and cycad nuts where amongst available dry season foods with a greater dependence on marine life, and fruits and berries throughout the wet (Dhimurru 1999: 19-20). Today Yolŋu still harvest resources from Manydjarrarrŋa-Ŋanydjaka; marine turtleand their eggs and trevally are particularly sought after (Dhimurru 1999:13).

Estates are inherently and significantly linked to each other through the moiety system *inter alia*, and this relationship is described by Dr Marika-Munuŋgiritj[7]:

Everywhere we can find the child and the mother, not only when we see people, but also when we see the land. This relationship is commonly referred to as yothu-yindi. In a yothu-yindi partnership, one partner is always Dhuwa, the other always Yirritja. The yindi is always considered to be the mother of the yothu, even if we are talking about two men, or two pieces of land. Sometimes Yirritja is the mother for Dhuwa, sometimes Dhuwa is the mother for Yirritja.

Patri-groups, like moieties, are social groups that function to determine relationships between people. The two systems are complementary as Mr N. Munuŋgiritj from the Yarrwidi Gumatj clan explains[8]:

People, plants, animals, water, land, the stars, our ceremonies and our creation stories are either Dhuwa or Yirritja. This helps maintain the balance in our culture. I am Yirritja, my wife is Dhuwa. Her clan is Rirratjiŋu. People always marry someone in a clan of the other moiety. My children are Yirritja, like me and Yarrwidi Gumatj, because I am their father. Gumatj and Rirratjiŋu have a special relationship with each other. We refer

[7] www.ntu.edu.au/Yolŋustudies

[8] (www.garma.telstra.com/background/yolŋu.htm#clans)

to ourselves as yothu yindi, which refers to the mother-child relationship, because our mutual responsibilities to each other are like those of a mother and her children throughout their lives.

Gurrutu: Yolŋu kinship

Yolŋu in northeast Arnhem Land share a common kinship and marriage system, and people are able to determine how they are related to each other or the relationship they have with another person by reference to kinship (even when two parties have never previously met) (Cooke 1987:8-9).

Exchange

Keen (2004:363) writes that in the past "all categories of kin were involved in gift exchange" and indicates the place exchange has had and continues to have in the maintenance of relations between people of different social categories. In a kin relationship such as that of a man and his male waku (sister's son) gifts indicating mutual support and exchange are made. Reciprocal gift-giving practices were formerly attached to marriage and exchanges began many years prior to a marriage and continued well into the next generation (Keen 2004:363-364). Members of different patri-groups nurtured ties through the exchange of gifts; for example, a gift would be made for the sharing of songs, dances or designs (Keen 2004:365). At the level of moiety, exchange was pivotal in important ceremonies where gifts were given to members of the opposite moiety who provided assistance to the moiety holding the ceremony (Keen 2004:363). Exchange routes existed between distant exchange partners and local goods could travel huge distances. Keen (2004:367) illustrates the movement of goods along dhukarr (paths) of exchange. Items such as calico, tobacco, blankets, glass and steel came from the north (Macassar). Stone spear-points and pounding stones came from the east and northeast. From the southeast and east came items such as boomerangs and possum fur. Hooked spears with bamboo shafts and human-hair belts travelled from the south and southwest, and forehead bands and fighting clubs were amongst products travelling from the west and northwest.

Land Use and Maintenance

Maintaining the health of estates is a major concern for Yolŋu, and in Dhimurru's report to the Australian Heritage Commission, Manydjarrarrŋa-Ŋanydjaka is cited as an area of great concern (Dhimurru 1999:36). The establishment of the Dhimurru Aboriginal Corporation in 1992 was in part a contemporary measure to manage lands on behalf of Yolŋu, lands they have cared for in economically and socially sustainable ways for many millennia (Dhimurru 1999:35-36). The use of traditional techniques of land management continues, and Yolŋu use of Manydjarrarrŋa-Ŋanydjaka involves regulated harvesting of resources as well as maintaining ritual responsibilities and storytelling and painting obligations (Dhimurru 1999:13). Williams (1986:93) discusses Yolŋu regulation of land use and points out that constraints exist even on owners' use of the resources of their own land. Estate health is sustained in many ways and the conservation of resources is integral to Yolŋu maintenance of their lands: Williams (1986:93-94) cites examples including that of women leaving enough yam in the ground when harvesting for regeneration, of Yolŋu releasing fish not immediately required for eating, of a ban on mining ochre from a site in danger of increasing erosion. Fire is used as not only a tool for hunting but also to maximise

the productivity of land. At the same time ritual benefits are gained from the purification of land through burning (Dhimurru 1999:27; Williams 1986:94). Caring for country has long served the Yolŋu well, and oral accounts tell of the different resources and richly varied diets available, for example, in the resources of Manydjarrarrŋa-Ŋanydjaka: :

> *…dugong, turtles, and fish from the open sea, turtle eggs from the shore, oysters, crabs and fish from the rocky shores of the peninsula, estuarine shellfish from the mud flats, and mammals, reptiles, echidnas, and birds from the land. Plant and plant products for shelter and tools were collected from the same range of habitats: the sea shore (Casuarina equisetifolia), monsoon forest (Semicarpus australiensis Engl.), savanna woodland, coastal dunes, and sandy outwash plains (Brachychiton paradoxum Schott, Terminalia sp., Pandanus sp.) and eucalypt forests (Melaleuca sp., Terminalia sp.) (Dhimurru 1999:20).*

Art and Ceremony

Yolŋu knowledge is embodied in myth and expressed in painting and ceremonial song and dance. Painting and sacred design are known as Miny'tji. Myths are references to nurturing land and day to day living; they determine where people camp on country and what foods are sourced (Morphy 1977:388). Patri-groups refer to the knowledge embodied by myth to determine identity. Through patrilineal succession from their founding waŋarr, owners of the ancestral designs painted on their bodies differentiate themselves from other design-owning groups (Morphy 1977:339,377). Groups sharing the same ancestral tracks own designs that may differ only marginally (Morphy 1977:343). Designs are manifestations from the beginning of time that signify origin events and also the landscape as it is today. Information contained in designs can inform Yolŋu readers in multiple ways. Morphy (1977:388) writes that, "the diamond design can resemble a fresh water turtle which stands in a similar relationship to the waŋarr being as the clan design". This visual mapping of Yolŋu territories and all they contain profoundly connects the past with the present and informs present day behaviour (Morphy 1977:342,388).

Ritual song and dance performed in ceremony similarly are manifestations of ancestral events and similarly affect contemporary behaviour. Owing to ancestrally endowed information, Yolŋu avoid certain sites on country and sea, or hunt in one area and not another (Morphy 1977:388; Warner 1969:238). Information stored in myth is accessed and made available through ceremony. Song and dance retell events from the beginning of time and function not only to educate but also to maintain the health and well being of Yolŋu country and society (Warner 1969:249,296,367-379). Warner (1969:379) writes that, "ceremony is designed to aid nature". In the performance of song and dance the continuity of seasonal cycles can be ensured, social relations strengthened, antagonisms healed and sickness prevented (Warner 1969:282-283,296,300-301). Well being depends on ceremonial re-enactments of origin events (Warner 1969: 380).

Macassan Connections

As noted above, it is difficult to establish exactly what period of time was involved in the trading partnership Yolŋu people maintained with the Macassans. Certainly this relationship spanned a period of two hundred years and perhaps more (Cooke 1986:7; Macknight 1972:284). One source infers that a shift in settlement patterns found in the archaeological record

about a thousand years ago suggests a possible link to the coming of the Macassans (Dhimurru 1999:20). Some Yolŋu people talk about trading relations with golden-skinned visitors called the Bayini (or Baiini) who predate Macassan traders (Dhimurru 1999:21). Uncertainties exist, but for many Yolŋu people these business-like, primarily cordial relations with foreigners hold a significant place in their contemporary worldview (Macknight 1972:286; Dhimurru 1999:21). The following story told by Gulawu Ŋurruwuthun (in Cooke 1987:22-23), a man from Yirrkala, is indicative of the types of relations that developed between Yolŋu and Macassan people:

> *A long time ago at a place called Garrkarrna, there lived Gumatj, Lamamirri and Rirratjiŋu tribespeople. The Rirratjiŋu tribe is originally from Yirrkala.*
>
> *These three tribes were living at that place and they didn't know about the Makassan strangers who came to that place. Those people from Makassar called themselves Makassans and the Aboriginals called them Maŋgatharra. The names of these Makassans were Daymbawi, Gurrumulna and Wanatjay.*
>
> *The boat had landed at a spot called Dhanaya. The boat and the Makassans were unknown to the Aborigines there. It was the first time that they saw people with light or brown skin. When they went to that place, some of the Makassan children went into the mangroves to gather some shellfish to eat.*
>
> *Some men heard the children talking and shouting in the mangroves. Then one of the men asked, "Who are those children and where did they come from?" The children became frightened and ran back to tell the others. They said, "We saw some people and their skin is black".*
>
> *Two Aboriginal men went to the beach and saw the Makassans dancing. One of these men was from the Gumatj tribe and the other, Lamamirri. First they saw the dancing and then the Makassans taught them the dance. The Makassans didn't make any trouble and were friendly, giving them rice to eat. Before, the old people used to call rice, gandirri. Then the Makassans started talking with them in sign language.*
>
> *As they began to learn the Makassans' language they began to work with them, collecting and cooking trepang. They started learning new names for axe, knife, clothes, tobacco etc. One of these men went with the Makassans to Indonesia. His name was Daymalatji.*
>
> *The Makassans used to travel from Makassar to Arnhem Land with the North Wind. It took a month to travel between these two places and was a long way by sailing boat.*
>
> *The place from which they were collecting trepang was at Galumay, and there are still some remains left including some pottery, from the times when the Makassans were there.*
>
> *So off they went to Makassar. It was a long trip and when they got there the Aboriginal man, Daymalatji, got himself a dog and he called him Bulili. He brought that dog back to Arnhem Land and showed it to his relations.*

Until 1907, as many as 60 prahu carrying sometimes 1000 primarily Macassan and Bugis traders arrived annually on seasonal winds to source and process trepang (Macknight 1972:283-284). While the Macassans' primary interest in

Australian shores was trepang, trade was valued, and Macassan goods were exchanged for tortoise shell, pearl, pearl shell and sometimes timber (Macknight 1972:284). A Macassan presence four months a year, while not culturally transforming, was influential (Macknight 1972:316) and new technologies entered the Yolŋu world. The dugout canoe (prahu inspired), harpoons crafted from metal, and glass which the Yolŋu manufactured as tools were amongst the changes (Macknight 1972:304-305). The Macassans were not dependent on Yolŋu labour but working relationships did develop between the two cultural groups. Macassan terms found a place in Yolŋu Matha, blood ties were formed between Macassans and Yolŋu, and Yolŋu people travelled to Macassar (Cooke 1987:9; Macknight 1972:286-288,306). The events of this era were recorded in Yolŋu song, dance, ceremony, and stories, making them available to today's generation (Macknight 1972:310-312).

The stone outline pictures at Wurrwurrwuy are evidence of the Macassan cycle of events impinging on Lamamirri and Gumatj life. A complete picture of a trepanging site has been outlined in stone at this site (Gray & Macknight 1970:26). The stone pictures were constructed by Yolŋu elders towards the end of the nineteenth century, and in the 1960s clan leaders Mungurrawuy Yunupingu and Mawalan Marika were principal informants for the oral tradition concerning the site. Mungurrawuy, leader of the Gumatj clan, told Gray and Macknight (1970:5-6) about the importance of this place by describing each of the stone arrangements. These pictures were left by Yolŋu elders as reminders to future generations of Macassan presence, and other similar sites can be found in Manydjarrarrŋa-Ŋanydjaka country (Dhimurru 1999:24). Photographs from 1967 showed that Yolŋu had kept the site clear of weeds, major growth, and obstruction (Macknight & Gray 1969; Dhimurru Aboriginal Corporation 1999).

Macknight (1972:298-304) provides examples of Gumatj borrowings of Macassan terms, and points to the existence of Gumatj contact stories (Macknight 1972:313). He also explains the significance of the Macassans and their material culture to the Yirritja moiety - the moiety most associated with "'outward' and 'innovatory' orientation" (Macknight 1972:314). Some Yirritja clans have totemic connections to the Macassans, and both Macknight (1972:314) and Dhimurru (1999:23) discuss the evidence of Macassan influence in the ceremonial life of Yirritja clans. In 1986 a reunion between members of Macassan and Yolŋu families took place in Ujung Pandang (formerly Macassar), Sulawesi and was the first contact in eighty years (see Cooke 1986).

Aspects of Macassan cultural heritage are significant cultural heritage values of the Dhimurru IPA. The significance of Macassan and Indigenous relationships as expressed at the Wurrwurrwuy site has been acknowledged by its recent inscription in the Northern Territory Heritage Register. A few aspects of cultural heritage significance of sites such as Wurrwurrwuy are listed below:

- At a basic level these sites can be a record of immediate contact between two distinct cultures with different languages, customs and technologies. They record significant moments in time that had consequences for both peoples that would alter the cultures in some slight but also many significant ways.
- Macassans had several impacts on Indigenous culture including alterations in marine tenure, exchanges of social customs (introduction of flags and clan totems (Clarke and Frederick 2006), introduction of foreign material

culture (metal), alterations in subsistence patterns (metal allowed for use of harpoons in turtle and dugong hunting), exchange of maritime technologies (introduction of dugout canoes and sails), and alterations in movement of people (dugout canoes extended ranges of Indigenous travel, social boundaries and settlement).

- Such sites have the potential to extend the date ranges of contact between Macassan and Indigenous peoples.
- Examples of South East Asian material culture on the Australian mainland and islands
- Archaeological research on Croker Island and Coburg peninsula has demonstrated that no dugong bones and few turtle remains are to be found in pre-Macassan midden sites but that following access to the new technology there is a dramatic increase in the remains of these animals with shifts in settlement pattern and decreased mobility that is reflected in the size and structure of shell middens (Mitchell 1994).
- The significance of coastal navigation, culture contact and culture exchange is an important research theme in archaeology. Contact period archaeology provides a view of Indigenous perceptions and interactions with outsiders in northeastern Arnhem Land, and the nature of culture contact during the period of Macassan maritime industry. Much of the contact archaeology has a specific maritime focus and is an important window into the interaction that Aboriginal people had with Macassan fleets and settlements of the time (Clarke 2000a; McIntosh 1996a; 2006).

Macassan archaeological sites have the potential to contribute significant amounts of data to the fields of Indigenous Archaeology and Maritime Archaeology. A 'two-way', or collaborative, approach allows for a comprehensive understanding of the use of the combined landscape and seascape by both cultures. Of particular interest in the Dhimurru IPA are the vessels used by these early groups of traders. While anecdotal evidence relating stories of vessels being wrecked and stranded ashore exists, no archaeological remains of Bajini or Macassan watercraft from the historic period have yet been located in Arnhem Land. The known sites are extremely significant at local, Territory and national levels because of their potential to add to the knowledge of pre-European visitors, as well as their ship construction and other maritime technologies. The site types would be protected under the Commonwealth *Historic Shipwrecks Act 1976* and could be potentially added to the Heritage Register through a declaration under the Northern Territory Heritage Conservation Act of 1991.

Indigenous Archaeological Site Significance

It is important to consider archaeological sites as part of an Indigenous cultural landscape. The archaeological record of the Gove Peninsula overwhelmingly demonstrates the importance of coastal resources to Aboriginal groups in the past. The ebbs and flows of Indigenous land use and occupation are represented in the cultural materials found within the area of the IPA. There is no doubt that the Indigenous archaeological sites in the IPA have the potential to contribute to further understanding in the following areas:

- Settlement and mobility of Indigenous people through time and space
- The regional nature and distribution of archaeological sites
- Adaptation to changing environments through time

- Social complexity and intensification issues in coastal zones of north Australia

Shell deposits can be dated, and species within the accumulations are direct evidence of faunal consumption and can contribute to investigations of social change in the late Holocene. Shell scatters and middens in the IPA reflect the intensive harvesting of maritime resources in nearby bays and estuaries. Shellfish taxa from the midden deposits reflect a time when some areas now dominated by mangroves were free of mangroves. The variety of shellfish taxa also indicates that a range of marine environments from the intertidal zone (*Anadara* sp) to deep water areas (*Pinctada* sp were exploited). A number of major shell species are represented in many of the shell assemblages and reflect the diversity and abundance of these species in the local area as well as a complex harvesting system employed by the Yolŋu.

The many shell scatters and middens serve to highlight the Yolŋu emphasis on coastal resource utilisation. Clarke (1994) predicted that the most recent sites (<100 years BP) would contain a minimum diversity of ecological species as different species fell out of favour with the introduction of other food items (e.g., flour, sugar, tea, beef). Shell scatters documented in the IPA area range from those dominated by one or two species to those containing up to eight species. Examination of the geomorphic context of the shell scatter sites is likely to reveal that the shell scatters and middens were deposited during the last 6,000 years. Based on evidence elsewhere in the Northern Territory (Bourke 2000), it is highly likely that the accumulations of *Anadara granosa* ceased approximately 300-400 years before the present. However, it must be noted that only future C14 dating research will positively establish the antiquity of the shell scatters in the IPA.

The exploitation of *Polymesoda erosa* is known to be still a common activity for local Yolŋu people. Given the high frequency of this type of shell found in previously documented sites in the region, the continuing tradition of utilising *Polymesoda erosa* illustrates its continuing importance in the local Aboriginal economy. According to Bourke (2000), shell middens and scatters in the Northern Territory arguably have high levels of cultural heritage significance in demonstrating changes and settlement patterns in the Northern Territory's cultural history.

The amount and diversity of archaeological material in a complex of archaeological sites is important especially with regard to site integrity when assessing archaeological significance. Generally, shell mounds possess aesthetic qualities through their large size as prominent cultural markers in the landscape. Researchers have shown that the existence of large *Anadara granosa* shell midden sites on the Cape York Peninsula has considerable cultural importance (Bailey 1994, Beaton 1985). Archaeological sites in the Dhimurru IPA contain a diverse range of shell taxa with the potential to yield scientific information not only about the people who created the sites during the last 6,000 years, but also about the environmental changes that occurred during that period.

IMPACTS AND MANAGEMENT ISSUES

The need for continued and effective cultural heritage management of the IPA has been emphasised in past and current management planning. Both impacts and management issues have been identified in relation to heritage places and values of the IPA. The issues discussed in this section have much in common with those in the many other coastal zones around the world that are under threat. Much of the development and re-development that is occurring in such areas follows long histories of human activity. The resulting threats include significant effects on local knowledge and understanding of a region, which, if they are not recorded or the threats mitigated, will be lost. Challenges to successful management of the Yolŋu cultural heritage values in the Dhimurru IPA include the following:

- Identification of risks, vulnerability, and adaptation possibilities
- Political economic challenges (from external or internal crises, competing claims or pressures)
- Governance effects (changes in legislation, regulations or Yolŋu authority structure)
- Climate change

Risks, threats, and vulnerability

Concern arises and has been expressed about the perceived and actual impacts from:

- increased recreational access and numbers of tourists
- mining
- recreational fishers
- professional fishers

The growth of the township of Nhulunbuy and industry on the Gove Peninsula continue to be directly correlated with the impacts of recreational access within the Dhimurru IPA that threatens Indigenous cultural heritage resources. Dhimurru estimates that access permits issued account for approximately 90 percent of actual Ŋapaki access (S. Roeger *pers. comm.* 2008).

Recreational access results in one of the most significant threats to Indigenous cultural heritage places in the Miwatj area. Recreational access has a range of tangible impacts including:

- Direct impact of vehicles on the fragile shell middens and Macassan sites of the region
- Damage to sensitive ecological systems, such as dunes and beaches and habitats of culturally and economically important species
- Negative aesthetic impacts on the landscapes (vehicle tracks, cars on beaches)
- Entering significant sacred site areas and causing offence to traditional owners and potential desecration

Specific reported incidents include the destruction of bollards at Ŋumuy and vandalism of interpretative signage at Nhulun. Dhimurru Rangers have reported numerous conflicts arising from competing recreational access and land use in the IPA area. This kind of conflict emerges from time to time as destruction and vandalism to IPA infrastructure and environmental degradation. At one stage, the original access road to Garanhan dissected Wurrwurrwuy, creating a thoroughfare for cars, motorbikes, and pedestrians. Continued exposure to the weather further accelerated erosion caused by the vehicular access.

Heritage place conservation activities undertaken thus far by Dhimurru include the establishment of interpretative signage at the Wurrwurrwuy and Nhulun site precincts. Site management at Wurrwurrwuy includes the maintenance of pathways, weed and fire control, and establishment of a buffalo-proof fence and an access road and parking area.

A Dhimurru review of current threats to cultural heritage places has identified the following:

- Fire and weeds
- Feral animals
- Erosion and landscape degradation
- Competition for space and resources
- Loss of Yolŋu traditional knowledge

Regional Economic Challenges

Regional economic pressures include mineral exploration in East Arnhem Land following the recent world-wide commodities boom. Energy resource industry interest along the Northern Territory coastline and in the hinterland has increased exponentially since 2000 (including the proposed Blacktip gas pipeline, Arafura Sea offshore gas pipelines, gas plants, and gas, petroleum and uranium exploration) and places extra pressure on the conservation of coastal resources. Territory and Commonwealth governments are increasing their focus on Indigenous education and employment issues with strong emphasis on sustainable economic ventures using Aboriginal land. Without appropriate planning, such ventures may have substantial environmental and cultural heritage impacts.

Cultural tourism is increasingly touted as a sustainable industry for Aboriginal communities. Pressures from such tourism ventures and sea use (e.g., sport fishing), pearl farming, and other aquaculture industries are also bringing new management challenges to local Aboriginal traditional owners.

Governance Issues

Governance in the form of political and administrative acts at all levels and contexts involves different stakeholders than those in ecological governance (i.e., environmental conservation). As a consequence, heritage management requires continuous risk assessment and caution in decision making.

Shifts in new policies and the way in which they are supported are critical in the development and application of cultural heritage management strategies. Conflict between issues such as economic development and heritage policy will increase and result in competition for relevance, institutional capacity, and funds. In order to influence outcomes, it will be necessary for Dhimurru

to take a robust approach to planners, developers, and ministers in the management of cultural heritage. It is important to express the 'community' attitude to the incorporation of cultural heritage values in the development and management of places of cultural heritage.

Changes in 'value' assessment and shifts and debates, such as those centering on climate change, will continue to occur. Cultural heritage places will continue to be characterised by changing levels of 'value' as they are continuously reassessed. The Miwatj region has already experienced the effects of changing values during the past 20 years as the result of mining, changes in energy requirements, and recreational use.

Climate Change

Low-lying areas of Australia's north are likely to be affected by extreme climatic change. Approximately 195,000 hectares of low-lying freshwater wetlands are around 0.2 to 2 metres above sea level. Since the Dhimurru IPA consists of large coastal areas, its capacity to maintain and conserve Indigenous cultural heritage may be threatened by fluctuations in sea levels that result from climate change. Archaeological sites that are at obvious risk include coastal middens, artefact scatters, sacred sites, camping and hunting places, and cultural and natural resource areas. Indigenous cultural heritage is also susceptible to damage from increased storm and cyclone occurrence and intensity resulting from climate change.

HERITAGE CONSERVATION MANAGEMENT POLICY CONSIDERATIONS

Conservation and management of the Indigenous heritage values of the IPA will be primarily achieved through reducing the risk of harm to these values. The conservation policy of the Dhimurru IPA uses a cultural landscape approach, and is based on Yolŋu values:

> *2.2.1 Protection of Yolŋu cultural values. All management actions ultimately focus on satisfying Yolŋu that the values they ascribe to the IPA lands are protected. If Yolŋu values are threatened management programs will be modified to remove the threat (Dhimurru IPA Plan of Management 2008 to 2015).*

Cultural heritage management is usually discussed in terms of conservation of the 'fabric' of a heritage place (e.g., in the ICOMOS Burra Charter). Conservation means all the processes of looking after a place so that it retains its cultural significance. The process of conservation is not to freeze the significance of a place in time, but to ensure that the place is appropriately cared for in relation to its cultural significance. The fabric of Indigenous sacred sites consists of both tangible and intangible features, and potential damage can occur to the social and religious fabric of Indigenous society as well as to the site/place itself. It is important to recognize both off-site and on-site impacts to Yolŋu cultural heritage places within the IPA. This approach does not intend to suggest confining Yolŋu cultural heritage to a historical perspective, but proposes to integrate places within the IPA in a living and dynamic Yolŋu approach built on continuing utilization,

nurturing, and protection. It follows that Dhimurru management policies are defined in term of protection of the living cultural landscape.

The risk to culturally significant places occasioned by the actions of Yolŋu families and clans is traditionally managed through compliance with complex religious, ceremonial, social rules, behaviours, and activities. Since European settlement, Yolŋu have had to modify their traditional cultural and social management strategies to include mainstream belief systems, management styles, and policies. It is nevertheless important to recognise the complexity of traditional Indigenous systems relating to the management of culturally significant places.

The cultural significance of Bäru, the saltwater crocodile, in the Yolŋu landscape illustrates how a cultural landscape approach plays out in daily management activities. The well-being of the spirit of Bäru depends on the physical and metaphorical conservation and management of the many factors relevant to the healthy existence of saltwater crocodiles. Bäru is a significant ancestral being to a number of Yirritja moiety Yolŋu clans directly and, indirectly, to related Dhuwa moiety clans. Hunting or killing Baru is governed by strict customs that are managed by the clans that are custodians of the principal myth narrative. Bäru habitat conservation is important to ensure the survival of this totemically important species. The health of the saltwater crocodile species is thus important to monitor and manage because the extinction of the species would have major consequences for Yolŋu spirituality and sacred sites. Accordingly, Bäru sacred sites must be conserved and managed to ensure the protection of the sacredness of the myth and the health of the Bäru habitat so that Bäru endures in Yolŋu society and belief systems. A significant impact on any one of these related factors would have a detrimental effect on the overall cultural heritage value of Bäru to the Yolŋu. The significance of Bäru serves to illustrate the fact that conservation and management of land and sea country has a direct conservation outcome for Yolŋu cultural heritage places (see for example Yunupingu 2009:32, and Morphy 1984:99-101, 110, 111, 123,138 for the significance and meanings of bäru expressed in ritual). In general terms, wildlife management can be seen to have a direct conservation impact on the intangible and off-site Indigenous cultural heritage values within the IPA.

Dhimurru CHMP is thus based on the premise that conservation and management of cultural heritage resources requires the inclusion of the Indigenous social system. The social fabric of Yolŋu society will be protected by ensuring that sacred sites are looked after, managed, and maintained according to Aboriginal traditional practices.

The activities of Dhimurru may be largely construed as concern with reducing risk of damage, desecration, and destruction to this significant Indigenous cultural heritage record that ensures stability and security for Yolŋu society. Yolŋu traditional owners have stated that the key to managing risk to Indigenous cultural heritage values of the IPA is preventative strategies.

Key cultural landscape management and conservation activities to be undertaken within the IPA are grouped under the following headings:

- Identification and documentation of cultural heritage places and values
- Heritage management and conservation planning
- Undertaking Management, Monitoring, and Conservation
- Heritage interpretation

Indigenous Heritage Management Database

According to the Australia ICOMOS Burra Charter, it is important to understand a 'heritage place' in order to develop appropriate conservation and management policy. Accordingly the management of a cultural landscape requires the development of an Indigenous cultural heritage place data management system that will aid Dhimurru in managing the cultural heritage resources of the IPA. The database, now referred to as the Dhimurru Management Information System (DMIS), will need to allow information to be compiled in a searchable format that can be queried about future management and conservation decisions relating to Indigenous cultural heritage of the IPA. Critical in the development of such a data management system is defining the kinds of data to be recorded and the kinds of information that Dhimurru requires to undertake management. The data to be recorded can be found in previous studies, relevant literature, archives, photographs, film, and consultations with Yolŋu. The purpose of creating a database that contains elements of tangible and intangible material culture and influences is to develop a set of heritage themes that can adequately deal with the complexities of Indigenous cultural heritage in the IPA.

The DMIS is not intended to replace or duplicate the formal archaeological or sacred site databases of Northern Territory Government agencies (i.e., NRETA and AAPA). The DMIS will provide a framework of data and Indigenous heritage themes that can be used by Dhimurru, researchers, and local Yolŋu communities to assist in making effective decisions regarding management, conservation, and assessment of cultural heritage places and to apply resources efficiently where they are needed.

Data recorded by Dhimurru is likely to include information about site locations and descriptions, excavation reports, photographs, archival material, and oral testimony. It is essential that information is stored and easily queried without wading through vast and lengthy reports. A relational database that can store and access disparate forms of information including scanned documents, photos, reports, video, audio, as well as metadata regarding site location and other details is necessary to encompass the wide variety of forms of traditional Indigenous knowledge. The DMIS should be used as a management and conservation tool much in the same way as a management plan and also as an information repository.

Dhimurru has responsibilities to Yolŋu regarding collected data and materials. International conventions developed by the United Nations, for example the Universal Declaration of Linguistic Rights and the Convention on Biological Diversity, recognise the need to protect the world's Indigenous cultures and traditions. These conventions require governments to provide for equity, access, and protection of Indigenous cultural heritage. In undertaking cultural heritage documentation, Dhimurru thus has an ethical responsibility to record and store data and audio-visual recordings in a sustainable, safe, and secure method. According to the Universal Declaration of Linguistic Rights adopted by the United Nations in 1996, declares in Article 46,

> *All language communities have the right to preserve their linguistic and cultural heritage, including its material manifestations, such as collections of documents, works of art and architecture, historic monuments and inscriptions in their own language.*

It is important that these principles guide Dhimurru in implementing policy and practice that meet international obligations to Indigenous peoples. Such

practices are recognised by the Museums Council of Australia (MCoA) guidelines titled "Previous Possessions, New Obligations: Policies for Museums in Australia and Aboriginal and Torres Strait Islander Peoples." Dhimurru, like other conservation agencies, has a role in collecting and maintaining traditional Indigenous ecological and cultural knowledge about the IPA and therefore has subsequent obligations to the Yolŋu from whom this material/information has been collected. The MCoA policy encourages institutions to work closely with the right Indigenous traditional owners to preserve their cultural property.

With the development of DMIS, it will be necessary during ongoing work and consultations with Yolŋu to inform people of the future use of the information that is collected. It will also be necessary to continue to consult with Yolŋu after the information is collected should there be changes in how the data and information are used and how they are to be stored and conserved.

Like many other conservation agencies that invest resources in the conservation of the physical fabric of a place or material culture objects, Dhimurru must also invest resources in the conservation of the intangible fabric of the IPA. The intangible fabric of sacred sites undergoes a transformation when recorded by Dhimurru and becomes a physical record stored in reports, field notes, photographs, video, and sound recordings. Dhimurru thus becomes a repository of knowledge about the IPA and needs to adopt appropriate conservation policies for the maintenance of this resource.

An Indigenous knowledge archive requires assessment, conservation policy development, and subsequent implementation of this strategy similar in nature to the protocol governing collections of bark paintings. Aboriginal material culture objects held in museums are continuously subjected to a process of assessment and conservation policy development. The process determines the level of cultural heritage significance, discusses how the object can be conserved, (i.e. will certain actions lessen the cultural significance of the object?), and a conservation policy is developed. This procedure assures sound decisions are made based on careful consideration and discussion of issues.

Dhimurru needs to develop an Indigenous cultural knowledge management system for the long term storage and conservation of the cultural data archive. This Indigenous traditional knowledge management system will store data in order to assist Dhimurru to make sound decisions on the protection and conservation of sacred natural sites in the Northern Territory.

Partnerships

It is important that Dhimurru and other agencies responsible for Indigenous cultural heritage management develop a relationship that facilitates information sharing, taking into account the secrecy and privacy principles of each organisation. In order to achieve a successful working relationship, it may be necessary to have a Memorandum of Understanding with the NLC, NRETA, and AAPA that establishes the bounds of future working relationships without having to reinvent the principles each time a need for cooperation arises. An MOU would greatly facilitate cultural heritage site protection, enforcement, and management.

A number of potential areas exist in which Dhimurru may engage in partnerships with other agencies for the protection, nurturing, and

conserving Indigenous cultural heritage values of the IPA. It may be necessary to establish MOU partnerships in order to store cultural materials that have come into the custodianship of Dhimurru. There will also be a need to assess the long-term custodianship of information documented in multi-media formats (i.e., video, sound, photography). A number of organizations have responsibility for recording, documenting, and archiving Indigenous traditional culture and knowledge.

Indigenous Heritage Recording and Research

A system of prioritisation is required for the future recording, protection, and conservation of Indigenous cultural heritage places within the IPA. The review of sacred sites within the IPA has revealed that a large number of sacred sites are yet to be entered on the Northern Territory Sacred Sites Register. Registration of such sites is a key objective of Yolŋu traditional owners. A team and partnership approach to Indigenous cultural heritage recording and complex site documentation would benefit the long-term objectives of cultural site protection for Yolŋu traditional owners.

HERITAGE POLICY 1: SACRED SITES

Definition

Indigenous sacred sites are defined as places of significance according to Aboriginal tradition. Sacred sites are found on the land and sea within the Dhimurru IPA. Sacred sites consist largely of Yolŋu cultural values associated with a range of features on land and sea.

Potential and Current Impacts

- Direct impact of visitors and their vehicles (land and sea)
- Disruption from development and regional infrastructure
- Entering sacred site areas and causing offence to traditional owners resulting in potential desecration
- Fire and weeds that potentially disrupt the traditional landscape
- Feral animals cause significant change to the natural landscape which in turn disrupts sacred sites
- Erosion and landscape degradation change the natural features of sacred sites
- Loss of totemic species
- Loss of Indigenous traditional knowledge, which impacts on the long term ability of Traditional Owners to maintain and care for sacred sites in culturally appropriate ways

Statement of Heritage Significance

Sacred sites in the Dhimurru IPA reflect the significant cultural values of Yolŋu estate ownership including their expression in art, ritual, and song cycles. Sacred sites are profoundly important to Yolŋu who retain considerable knowledge of the sites and have an active interest in continuing to nurture, conserve, utilise, and protect them. Sacred sites constitute a large proportion of the IPA landscape. Twenty-five percent of the IPA coastline is covered by sacred sites.

Conservation Statement

All sacred site management and conservation activities are to be guided by the principles of local consultation as stipulated in the Dhimurru Constitution, IPA Plan of Management, the Sea Country Plan, and this document. Sacred sites are a core component of the Dhimurru IPA and must be appropriately managed according to the directions of Yolŋu Traditional Owners and Custodians. The large areas covered by sacred sites within the IPA require a landscape management approach recognising the ineluctable connection between natural and cultural resources and the processes operating across the landscape. The health of the natural environment is directly related to the health of the cultural landscape and consequently the health of the traditional owners and custodians who are responsible for it. Sacred sites are protected under the *Northern Territory Aboriginal Sacred Sites Act* 1989 and the *Aboriginal Land Rights Act* 1976. Impacts to Yolŋu sacred sites must be minimized through monitoring and regulation of access to the IPA. Conservation of sacred sites within the IPA will be achieved by ensuring that Dhimurru continues to carry out its duties as charged by the Yolŋu Traditional Owners. A coordinated approach to the management by Dhimurru, Yolŋu Traditional Owners, and statutory authorities should be paramount.

HERITAGE POLICY 2: INDIGENOUS, MACASSAN, AND MARITIME ARCHAEOLOGICAL PLACES

Definitions

Indigenous and Macassan archaeological places include:

- Artefact scatters that may contain flaked or ground artefacts and hearthstones. Artefact scatters may occur as surface scatters of material or as stratified deposits that are the result of repeated occupation. These scatters do not necessarily imply that prehistoric people actually camped on the site; rather, they may only indicate that some type of activity was performed there.
- Stone quarries. Sites where stone for flaked or edge-ground artefacts has been extracted from an outcropping source of stone.
- Knapping locations may consist of one or more knapping floors, are discrete scatters of artefacts anywhere in the landscape that result from stone being worked or reduced at that spot.
- Shell middens are deposits containing shells occurring in an open area near a beach or estuary, or rocky shoreline, or an inland lake or river.
- Stone arrangements can range from simple cairns to more elaborate arrangements. Some stone arrangements were used in ceremonial activities and represent sacred or totemic sites. Other stone features were constructed by Aboriginal people as route markers, territory markers, walls of huts or animal traps, hides, or seed traps.
- Rockshelter occupation sites which contain a deposit of cultural material that has built up over time and contain flaked or ground stone artefacts, faunal material and various other items of Aboriginal material culture including ancestral human skeletal remains, wax designs, rock art, grinding hollows, and caches of material culture objects.

- Contact sites that contain foreign materials, such as glass, ceramics or metal, which exhibit modification by Aboriginal people. Alternatively a contact site may be identified by the presence of Macassan or European objects, which may be unmodified but are the result of transportation to that locality by Aboriginal people. Contact sites represent the interface between Aboriginal, Macassan and European peoples during early contact in the Northern Territory.
- Macassan sites contain foreign materials such as glass, ceramics or metal, tamarind trees, and built features such as trepang processing stone lines. Macassan sites may also consist of maritime cultural heritage in the form of submerged materials, i.e., shipwrecks.
- Maritime sites associated with the region may include shipwrecks, anchorages, ship construction sites, careening/ship repair sites, abandoned canoes, canoe construction sites and artifacts directly associated with the vessels and technologies employed.

Potential and Current Impacts

- Direct impact of visitors and their vehicles
- Fire and weeds that disrupt archaeological sites. Shell middens and Macassan sites are particularly vulnerable. Tamarind trees can be destroyed. Shell middens may be impacted by invasive weed species.
- Feral animals cause significant impacts that disrupt the integrity of archaeological sites and cause significant loss of scientific and native title value
- Erosion and landscape degradation disrupt the integrity of archaeological sites causing significant loss of scientific and native title value.
- Disruption by development and infrastructure

Statement of Heritage Significance

Indigenous archaeological sites within the Dhimurru IPA represent Yolŋu land use and occupation for many thousands of years. In particular, many of the sites illustrate the important connection between Yolŋu and their country. These places allow Yolŋu to reflect on their ancestral past and investigate the changes that may have occurred in the IPA landscape. Macassan archaeological sites in the IPA outline a record of contact between the Yolŋu of north eastern Arnhem Land and Macassans that continued for many centuries. Historical information reveals that since the early 18th Century, fleets of up to sixty vessels would journey from Macassar to the waters of the Northern Australia each year. The seafarers from Macassar in Sulawesi came annually for trepang (*dharripa*), pearl, and turtle shell. The sites where they camped are an important tangible reminder to the Yolŋu of their past connections with the Macassans. Some Yolŋu tradition suggests that similar visits and exchange began as early as 800 years ago by people known as Bajini and began the long tradition of interaction between the inhabitants of Arnhem Land those of the Indonesian archipelago. Macassan visits are recorded to have continued until 1907, when the South Australian Government closed the coast to the Macassans.

Over many centuries seafarers from other lands voyaged to places on the north Australian coast that include sites now on the Dhimurru IPA, in order to obtain commodities through trade. Maritime archaeological sites within the IPA provide evidence of this contact and the relationships that developed, as well as marine resource utilization and exchange. Visits by

Europeans to Arnhem Land began as early 1606 and continued occasionally until the first attempts of the English to settle in western Arnhem Land in the 1820s. Though unsuccessful, these attempts led to the eventual establishment of cities and ports that would see an influx of people to the Northern Territory from countries in Europe, Asia and North America. Maritime activities are intimately linked to each of the phases of settlement including the mission period and World War II.

Conservation Statement

All archaeological site management and conservation activities are to be guided by the principles of local consultation as stipulated in the Dhimurru Constitution, IPA Plan of Management, and the Sea Country Plan. Conservation of Indigenous, Macassan, and Maritime archaeological sites within the IPA will be achieved by ensuring that Dhimurru continues to carry out its duties as charged by the Yolŋu Traditional Owners. A collaborative approach to documentation, management, and conservation by Dhimurru, Yolŋu Traditional Owners, statutory authorities, and research institutions should be paramount.

HERITAGE POLICY 3: INDIGENOUS PLACES OF HISTORIC CULTURAL SIGNIFICANCE

Definition

Indigenous places of historic significance include but not limited to:

- Places with historical family associations
- Areas and places of traditional natural resource use
- Places of significance from the historic Mission period
- Places of significance from World War 2
- Places of recent significance (i.e. related to the struggle to win land rights)

Potential and Current Impacts

- Direct impact of visitors and their vehicles (land and sea)
- Disruption from development and regional infrastructure
- Entering significant historic areas and causing offence to traditional owners
- Fire and weeds that disrupt the historic landscape. Potential of fire to destroy historic structures.
- Feral animals cause significant changes to the natural landscape, which in turn disrupts historic heritage places
- Erosion and landscape degradation change the natural features of historic heritage places
- Loss of Indigenous traditional knowledge impacts on the long term ability of Traditional Owners to maintain and care for traditional historic and resource use areas in culturally appropriate ways

Statement of Heritage Significance

Yolŋu historical heritage values exist in many aspects of the Dhimurru IPA. The IPA has many areas of significant resource use, and Yolŋu have

considerable knowledge of the area's ecological resources. Many events of national historic significance as well as many important local events have occurred on the Dhimurru IPA. Such events are intrinsic to Yolŋu efforts to demonstrate their sovereignty over their land and sea country. The Dhimurru IPA has been affected by major events such as World War 2 and the establishment of one of the largest and longest operating mines in the Northern Territory. In contrast, the Dhimurru IPA is part of the Yolŋu homeland and holds significant memories for many local families.

Conservation Statement

All Yolŋu cultural place management and conservation activities are to be guided by the principles of local consultation as stipulated in the Dhimurru Constitution, IPA Plan of Management, and Sea Country Plan.

HERITAGE MANAGEMENT ACTIVITIES

The following table outlines the cultural heritage management priorities and activities for Dhimurru.

Management Objectives	Actions/Targets	Priority	Timing	Partners
Monitor and manage public access to sacred sites, archaeological sites, and places of other Indigenous cultural value	Ranger patrol program to aim to have annual inspection of all recorded cultural places Undertake regular (monthly) site inspections Monitoring and patrols will be used to update and audit the condition of cultural heritage places Update track maintenance schedule Negotiate formal agreement with Alcan and the NTG regarding track maintenance	H	Ongoing	Rio Tinto Alcan Gove NTG
Review of current protocols for access to areas near land and sea sacred sites	Yolŋu consultation and discussions with agencies draft protocols and provide for Yolŋu comment Implement new protocols	H		AAPA NLC
Maintain and operate an access permit system	Review permit system Issue Permits Permit audit during patrols	H	Ongoing	NLC
Develop a collaborative and systematic approach to cultural heritage management strategies	Begin discussions with AAPA, NLC, NRETA, DEWHA	H		AAPA

with statutory enforcement agencies. Establish a Memorandum of Understanding between NLC, AAPA, NRETA, DEWHA and Dhimurru with a view ultimately to have an enforcement role in Indigenous cultural heritage site management and protection	Review of current cultural site infringement reporting protocols Information sharing and collaborative research agreement Define statutory boundaries of registered Indigenous heritage places on GIS systems Develop access protocols Compilation of information to create site register and site case files Draft MoU Consultations/Feedback with Yolŋu community Implement MoU			NLC NRETA DEWHA
Prioritise areas for sacred site, archaeological, and historic heritage place surveys, registrations, and nominations to statutory registers	Review areas of priority with Yolŋu community Review current Dhimurru priority areas with community concern Extend cultural site mapping with land owners Register sacred sites on the Northern Territory Sacred Sites Register Identify potential research collaborators who adhere to NAILSMA research guidelines and Dhimurru protocols			AAPA NLC NRETA
Monitor and remove weeds and feral animals	Revise IPA weeds strategy Identify areas of feral animal and weed infestation in relation to cultural heritage places Concentrate on dangerous high priority weeds, particularly perennial mission grass Monitor buffalo and pig numbers and respond accordingly	H	Ongoing	NRETA PWCNT DPI
Manage fire and facilitate its use in Yolŋu landscape management	Implement annual fire management plan Review with Yolŋu community			

	with reference to cultural places
Monitor and assess the biodiversity values of significant totemic species	Implement biodiversity management plan Review fire management plan relevant to cultural places with Yolŋu community
Develop and operate an information management system to promote informed practice, prioritise management actions, and development of interagency data relationships and protocols	
Develop appropriate interpretive information for the public to ensure better 'both way' understanding of the significance of Yolŋu cultural heritage in publicly accessible areas.	
Monitor and limit public access to identified historic heritage places	

TRAINING

A number of training and capacity building objectives have been identified in the development of this conservation and management plan. Training initiatives for Dhimurru to manage effectively the Indigenous cultural heritage values of the IPA are listed in the table below. Training of Dhimurru staff will be necessary to develop the capacity of rangers to identify, record, and assess Indigenous cultural heritage features within the IPA. Training initiatives include developing skills in heritage place identification and recording, developing technical skills with survey and recording equipment, reporting skills, and improving computer literacy. Areas such as developing maritime archaeological skills are also important for managing sea country areas of the IPA. Completion of the Yolŋu matha course should be introduced as a requirement for regular employment of non-Yolŋu Dhimurru staff members.

Training should include an induction program for non-Yolŋu staff and Dhiumurru partners. In addition to the use of *Ask First*, the *NAILSMA Guidelines and Protocols for the Conduct of Research* will be an important source.

Training and Staff Development				
Management Objectives	**Actions/Targets**	**Priority**	**Timing**	**Partners**
Training staff to undertake cultural heritage surveys	Certificate in Conservation and Land Management	H		Batchelor
	Ongoing archaeological survey training			Batchelor Rio Tinto NRETA NRETA AAPA
	Heritage and sacred site enforcement training			Batchelor Australian Federal Police
Ŋapaki Participation	Ŋapaki cultural and language induction			CDU
Training for Dhimurru Indigenous Heritage Management Database	Provision of ongoing training			Database Service Provider
Training for using technology	GPS, mapping, and survey methods			Batchelor
	Diving qualifications (PADI)			AIMA/NAS Dive Operators
	Film, photography, sound recording			Buku Larrnggay
Heritage conservation training	Certificate CLM Maritime AIMA/NAS Conservation and heritage management courses			Batchelor AIMA/NAS NRETA CDU University of Canberra Flinders University Rio Tinto
Practical On-Site Training	Training through participation on sacred site surveys Training through participation on archaeological site surveys			AAPA
	Public archaeology – investigation of cultural heritage resources of the IPA			Batchelor Rio Tinto Flinders University ANU

KNOWLEDGE GAPS AND INFORMATION MANAGEMENT

Development of the Dhimurru Management Information System is an important priority for managing Indigenous heritage values within the IPA. A review of existing Indigenous cultural heritage database options is necessary to provide a platform for managing Dhimurru IPA heritage and Indigenous knowledge. Data management processes and systems are crucial for management planning the heritage resources in the IPA. This process will require the development of links to Government agencies, links that will allow the creation of protocols for accessing Indigenous cultural heritage data relating to registered and recorded sacred sites and archaeological sites (i.e., held by AAPA and NRETA). It will also be essential to identify sources of information on Indigenous cultural heritage places within the IPA held at various institutions (e.g., AIATSIS, state archives). Managing Indigenous heritage places within the IPA will require defining the statutory boundaries of registered Indigenous heritage places on a GIS platform. Compiling this information is an important part of capturing the management history of places within the IPA and establishing a 'case file' system. This information will inform future heritage planning processes and provide a repository for Yolŋu traditional knowledge of the IPA.

Knowledge Gaps				
Management Objectives	**Actions/Targets**	**Priority**	**Timing**	**Partners**
Establish and maintain the Dhimurru Management Information System	Assess database platforms Develop inventory of information to be recorded Compile data for input from Territory and Commonwealth heritage agencies Develop interagency data relationships and protocols Regular patrols to identify Indigenous cultural heritage features and update site register	H	ongoing	AAPA NRETA DEHWR
Improve the understanding of the regional distribution of the Indigenous cultural heritage resources	Review background documentation, state and national heritage registers, grey and academic literature review, historic records. Regional surveys Updating of the current status of known sites through patrols and monitoring activities			AAPA NRETA Batchelor Rio Tinto Various research institutions
Improve the understanding of the distribution and nature of the sacred landscape	Regional Surveys			AAPA
Understanding of the length of time of Indigenous occupation of the Gove Peninsula and environmental change	Archaeological investigation			NRETA Various research institutions

SHARING KNOWLEDGE AND PUBLIC EDUCATION

Interaction and relationship with the entire community are fundamental to the success of protecting, conserving, and nurturing the Indigenous heritage values of the IPA.

The generation and delivery of interpretive and educational material to the public is an important function of any cultural heritage management agency. A review of heritage places will require the development of interpretative signage to explain their significance to Yolŋu and will assist in prioritising places at risk and work programs. Dhimurru will also review current publications and planning of new documentation in response to increased visitor numbers and regional development in order to ensure the protection of cultural heritage values within the IPA. The review will be followed by a program of installation of signage and publication of interpretive materials.

Sharing Knowledge				
Management Objectives	**Actions/Targets**	**Priority**	**Timing**	**Partners**
Public presentations and talks to the community	Develop a program of regular public presentations to community to inform the public of cultural heritage research and works Identify indigenous stories to be shared with the public through publication (books, media, brochures) Update visitors guide			AAPA NRETA Batchelor Schools Researchers Buku Larnggay Rio Tinto Various research institutions
Film, TV, and Multi Media	Undertake a proactive approach to dissemination of information about Dhimurru activities to the Yolŋu community and national and international audiences			Buku Larnggay Yothu Yindi Foundation Various research institutions Public broadcasters
Interpretation	Compile and review materials for use in interpretative information. Review sites that need the development of interpretative signage to explain the significance of Yolŋu cultural heritage places Review current publications and plan new documentation in response to increased visitor numbers and regional development Install and publish interpretive materials Use access permits to share Indigenous heritage through issuing interpretative material to visitors			AAPA NRETA Researchers Various research institutions
Public exhibit space at new cultural centre	Opportunity to present Yolŋu culture			MAGNT Various research institutions

BIBLIOGRAPHY

Aboriginal Areas Protection Authority 2004 ***Fifteenth Annual Report for the Period Ended 30 June 2004***. Northern Territory Government, Darwin.

Australian Heritage Commission 2002 ***Ask First: a Guide to Respecting Indigenous Heritage Places and Values.*** National Capital Printing, Canberra.

Bailey, G. 1994 The Weipa shell mounds: natural or cultural? In Marjorie Sullivan, Sally Brockwell, Ann Webb (eds), ***Archaeology in the North***, Proceedings of the 1993 Australian Archaeological Association Conference, North Australian Research Unit ANU, Darwin. Pp.107-129.

Beaton, J.M. 1985 Evidence for a coastal occupation time-lag at Princess Charlotte Bay (North Queensland) and implications for coastal colonisation and population growth theories for Aboriginal Australia. ***Archaeology in Oceania*** 20:1-20.

Bourke, P. 2000 ***Late Holocene Indigenous Economies of the Tropical Australian Coast: an Archaeological Study of the Darwin Region***. Unpublished PhD thesis, Northern Territory University, Darwin.

Callahan, P. (ed) 1988 ***With the RAAF at Gove***. Publication funded by National Trust Bicentennial Project, copyright P. Callahan, Darwin.

Chaloupka, G. 1993 ***Journey in Time: The 50,000 Year Story of the Australian Rock Art of Arnhem Land***. Reed Books Australia, Melbourne.

Chappell, J. 1988 Geomorphological dynamics and evolution of tidal river and floodplain systems in Northern Australia. In D.Wade-Marshall and P.Loveday (eds), ***Floodplain Research, Volume 2***. Northern Australia Research Unit, Australian National University, Darwin.

Christie, M. 2002 ***Yolŋu Languages and Culture: Gupapuyngu***. Teaching & Learning Support Division, Charles Darwin University, Darwin.

Clarke, A. 1994 ***Winds of Change: an Archaeology of Northern Australia Contact in the Groote Eylandt Archipelago***. Unpublished PhD Thesis, Australian National University, Canberra.

Clarke, A. 2000a Time, tradition and transformations: the negotiation of cross-cultural engagements on Groote Eylandt, Northern Australia in ***The Archaeology of Difference; Negotiating Cross Cultural Engagements in Oceania***, R. Torrence and A. Clarke (eds). Routledge, London.

Clarke, A. 2000b "The Moormans Trowsers": Macassan and Aboriginal interactions and the changing fabric of Indigenous social life, in S. O'Connor and P. Veth (eds), ***East of the Wallace Line: Studies of past and present maritime cultures of the Indo-Pacific region***. AA Balkema, Rotterdam, pp. 315-35.

Cooke, M. 1987 ***Makassar and Northeast Arnhem Land: Missing Links and Living Bridges***. Ujung Pandang: Indonesian Cultural and Education Institute.

Davis, S. 1985 Aboriginal tenure of the sea in northern Arnhem Land. In F. Gray and I. Zann (eds), Workshop Series 8: ***Traditional Knowledge of the Marine Environment in Northern Australia, Proceedings of a Workshop Held in Townsville, Australia, 29 and 30 July 1985.*** Great Barrier Reef Marine Park Authority and Commonwealth Department of Primary Industry, Townsville.

Dewar, M. 1992 *The 'Black War' in Arnhem Land: Missionaries and the Yolngu 1908 – 1940*. North Australian Research Unit, Australian National University, Darwin.

Dhimurru Aboriginal Corporation 2007 *Recording Macassan sites in the Dhimurru Indigenous Protected Area*. Unpublished Report, Nhulunbuy.

Dhimurru Aboriginal Corporation 1999 *Assessment of Heritage Values Against Criteria for Listing on the Register of the National Estate: Assessment Table – Manydjarrarrŋa-Nanydjaka.* Unpbulished Report, Nhulunbuy.

Dhimurru Aboriginal Corporation 1999 *Final Report to the Australian Heritage Commission: Documentation of Heritage Values – Nanydjaka*. Unpublished Report, Nhulunbuy.

Dhimurru Aboriginal Corporation 2000 *Indigenous Protected Area Management Plan*. Unpublished Report, Nhulunbuy.

Environment Australia 1999 *An Overview of the Environment Protection and Biodiversity Conservation Act*. Australia, Commonwealth, Department of the Environment and Heritage, Canberra.

Evatt, E (Hon) 1996 *Review of the Aboriginal and Torres Strait Islander Heritage Protection Act 1984.* A report to the Minister for Aboriginal and Torres Strait Islander Affairs, Commonwealth Government, Canberra.

Gilbert, K. N. 1973 **Project and Consruction Management – Gove Project.** Annual Engineering Conference 1973 Proceedings pp. 235-244.

Gray, W. and C. Macknight 1970 *Aboriginal Stone Pictures in Arnhem Land*. Australian Institute of Aboriginal Studies, Canberra.

Kauffman, P. 1998 *Wik, Mining and Aborigines*. Allen and Unwin, Sydney.

Keen, I. 2004 *Aboriginal Economy and Society*. Oxford University Press, Melbourne.

Macknight, C. C. 1969 **The Macassans: a Study of the Early Trepang Industry Along the Northern Territory Coast.** Unpublished PhD thesis, Australian National University, Canberra.

Macknight, C. C. 1972 Macassans and Aborigines. *Oceania* 42(4):283-321.

Macknight, C .C. 1986 Macassans and the Aboriginal past. *Archaeology in Oceania* 21:69-75.

Maquis-Kyle, P. and M. Walker 1992 *The Illustrated Burra Charter: Making Good Decisions About the Care of Important Places*. Australia, Commonwealth, Australian Heritage Commission, Canberra.

McDonald, J. 2005 *Desktop Assessment of Scientific Values for Indigenous Cultural Heritage on the Dampier Archipelago, Western Australia*. Report to the Heritage Division of the Department of Environment and Heritage, Australia, Commonwealth, Canberra.

McIntosh, I. S. 1996a *Can We Be Equal in Your Eyes?; a Perspective on Reconciliation from North-east Arnhem Land.* Unpublished PhD Thesis, Northern Territory University, Darwin.

McIntosh, I. S. 1996b Islam and Australia's Aborigines? A perspective from north-east Arnhem Land. *Journal of Religious History* 20(1) 53-77.

McIntosh, I. S., 2006 A treaty with the Macassans? Burrumarra and the Dholtji Ideal. *The Asia Pacific Journal of Anthropology* 7(2): 153-172.

Mitchell, S. 1994 *Culture contact and indigenous economies on the Coburg Peninsula, northwestern Arnhem Land.* Unpublished PhD thesis, Northern Territory University, Darwin.

Mitchell, S. 1996 Dugongs and dugouts, sharptacks and shellbacks: Macassan contact and Aboriginal marine hunting on the Coburg Peninsula, north-western Arnhemland. *Bulletin of the Indo-Pacific Prehistory Association, Chiang-Mai Papers*, v2, No.15. pp.181-191.

Morphy, H. 1977 *Too Many Meanings: An Analysis of the Artistic System of the Yolngu of Northeast Arnhem Land*. Unpublished PhD Thesis, Australian National University, Canberra.

Morphy, H. 1984 **Journey to the Crocodile's Nest.** Australian Institute of Aboriginal Studies, Canberra.

Morphy, H. 1991 *Ancestral Connections: Art and an Aboriginal System of Knowledge*. The University of Chicago Press, Chicago.

Mulvaney J. and J. Kamminga 1999 *Prehistory of Australia*. Allen and Unwin, Sydney.

Northern Territory Place Names Committee 1963 Files 93/1007, folio 2.

Pannell, S. 2006 *Reconciling Nature and Culture in a Global Context: Lessons from the World Heritage List*. James Cook University, Townsville.

Rawlings, D.J., P.W. Haines, T.L.A. Madigan, B.A. Piesch, I.P. Sweet, K.A. Plumb and A.A. Krassay with Z.U. Bajwah 1997 *Arnhem Bay-Gove SD53-3,4 1:250,000 Geological Map Series Explanatory Notes*. Government Printer of the Northern Territory. Darwin.

Ritchie, D. 1994 Principles and practice of site protection laws in Australia. In **Sacred Sites, Sacred Places,** D.L. Carmichael, J. Hubert, B. Reeves, and A. Schanche (eds), Rouledge, London.

Russell, D. 2004 Aboriginal-Makassan in the eighteenth and nineteenth centuries in northern Australia and contemporary sea rights claims. *Australian Aboriginal Studies* 1:3-17.

Sauer, C. O. 1925 *The Morphology of Landscape*. University of California Publications in Geography, No. 22, pp. 19-35. Republished in *Land and Life: a Selection from the writings of Carl Ortwin Sauer*, J. leighly (ed), University of California Press 1965.

Thomson, D. F. 1949 *Economic Structure and the Ceremonial Exchange Cycle in Arnhem Land*. Macmillan, Melbourne.

Thomson, D. F. 2003 *Donald Thomson in Arnhem Land, compiled and edited by N. Peterson.* The Miegunyah Press, Carlton.

Thornell, H. 1986 *A Bridge Over Time: Living in Arnhemland with the Aborigines 1938-1940.* Boronia: J. M. Dent.

UNESCO 2005 *Operational Guidelines for the Implementation of the World Heritage Convention*. Unesco World Heritage Centre, Paris.

Wade Marshall, D. and P. Loveday (eds) 1988 *Northern Australia: Problems and Prospects, Vol 1, Contemporary Issues in Development.* North Australian Research Unit, Australian National University, Darwin.

Warner, W. L. 1958 *A Black Civilization: A Social Study of an Australian Tribe, 2nd ed.* Harper & Row, New York.

Wells, E. 1982 *Reward and Punishment in Arnhem Land 1962-1963.* Australian Institute of Aboriginal Studies, Canberra.

Wild, R. and C. McLeod (eds) 2008 *Sacred Natural Sites:Guidelines for Protected Area Managers*. IUCN, Gland, Switzerland.

Williams, N. 1986 *The Yolngu and Their Land: A system of Land Tenure and the Fight for its Recognition*. Australian Institute of Aboriginal Studies, Canberra.

Wilson, B.A., Brocklehurst, P.S., Clark, M.J. and Dickinson, K.J.M. 1990 *Vegetation Survey of the Northern Territory, Australia, Technical Report Number 49*. Conservation Commission of the Northern Territory, Palmerston.

Woodroffe, C. 1993 *Late Quaternary evolution of coastal and lowland riverine plains of Southeast Asia and northern Australia: An overview*. Sedimentary Geology 83: 63-175.

Yunupingu, D. 1992 Waanga ga rumbal ngilimurru. *Yan* 3:16-21. Yirrkala Literature Production Centre, Yirrkala.

Yunupingu, G. 2009 Tradition, truth & tomorrow. *The Monthly* December 2008-January 2009:32-40.

APPENDIX 1. RECORDING INDIGENOUS CULTURAL HERITAGE PLACES

Indigenous Heritage Place Recording

A variety of cultural heritage places exists within the Dhimurru IPA. It is difficult to become expert in the documentation of every type of heritage place, from Indigenous sacred sites and shell middens to World War 2 airstrips or old Mission houses. However, with modern tools and methods, the land manager can be prepared to identify various aspects of cultural heritage and can be prepared to undertake a summary level of recording and documentation.

Location. Recording the location of a place is vital for management. The spatial information about location can be recorded via a topographic map AMG grid reference, a cadastral or NT Portion number, a street address, or latitude and longitude.

Extent of a Place. The extent of a heritage place should always be recorded. The extent may be large, for example many hectares of a monsoon vine forest, or very small, for example, in the case of a shell scatter, only a few square meters. A place can be measured with a tape measure. Pacing or using a GPS may be used when recording a large-scale site such as a large sacred site complex.

Description of the Place. The description of a place is usually a factual account of what you can see when you inspect a site. If the place is a building it is important to describe its features (e.g., gable roof), its type of construction (e.g., masonry), what it is made of (e.g., corrugated iron, sandstone). Attention to detail is important.

Artefacts. Archaeological sites in the Northern Territory will almost certainly be characterised by a field of debris consisting of cultural material. Evidence at Indigenous archaeological sites will be dominated by the discard of stone tools and remains of resources consumed (e.g., shells). Historic archaeological sites will be characterised by debris typical of the era (e.g., glass, metal and ceramics). Artefacts from 1880s mining activities will differ from abandoned pastoral stations and World War 2 sites.

Aboriginal stone tools or artefacts can be identified as manufactured objects because of the way force moves through the stone when they are being made and used. Each time sufficient force is placed on the surface of an isotropic rock it will fracture and result in two pieces. The fragment that has been struck contains the ring-crack, where fracture was initiated and is called the flake. The flake is usually the smaller of the two pieces of stone. The larger fragment, from which the flake has been removed, is called the core. On both the flake and the core the surface that is struck is called the platform. Flakes can be identified by the distinctive surface, known as the bulb of percussion, created as they are stuck from the core.

Condition of a Place. As well as recording a detailed account of the type of heritage place and its features, it is important to describe its current condition. The description will largely depend on the type of heritage place that is being recorded. A building will require notes about rust on metal, rising damp in walls, condition of the roof, water shedding capabilities, and so on. Threats from the surrounding environment should be noted.

At a minimum, an Indigenous heritage place record should include:

- A checklist of equipment required for the inspection (i.e., GPS, camera, notebook, video, sound recording, tape measures)
- Checklist of conditions and surrounds that should be inspected
- Names of any people associated with the site
- Location map or sketch of the site.
- Record UTM coordinates using GPS
- Boundaries of the site and estimate of the area.
- A site place should also identify all points of interest and elements of significance.
- Description of the place – what does it look like
- Photographs or diagrams of the site and points of interest or significance of any objects, items
- Signs of previous human activity assessed and documented
- The reasons for identifying potential significance
- Notes on the condition of any objects, buildings, or elements of significance
- Notes on any damage or deterioration
- Notes on the integrity of the place
- Note and describe in detail any potential safety risks, hazards or situations.

Writing Reports on Indigenous Cultural Heritage Places

At a minimum, any short reports on any Indigenous heritage places should include the following:

- Introductory background and explanation of its significance
- Identification of the stakeholders and Traditional Owners associated with the place
- Site plan and location with the elements of significance
- Photographs, drawings or sketches of the elements of significance labelled with explanatory notes.
- Any current threats to the place
- The land tenure of the place
- Accurate location indication of the boundaries that include all areas of cultural significance
- Using references and your field notes from the site inspection, description of the natural history of the site, landforms, soils, and vegetation.
- Description of the condition of the site. What is its current condition with respect to weeds, fires, disturbance, feral animals? What are the threats to the site and how are they managed? Include a list of references
- A review of the current management system in place for the site
- Identification of any interim measures that should be taken to avoid degradation, disturbance, or deterioration, and any action that may contravene cultural protocols
- Evaluation of any damage to determine short-term and long-term impact on the significance of the place
- Identification of any OH&S issues, safety risks or hazards

- Any urgent actions necessary to remedy OH&S or safety issues
- Recommendations for maintenance and monitoring
- Recommendations with regard to visitor numbers and control of access to minimise disturbance and/or degradation
- Recommendations for the restoration or modification of any geophysical surrounds eg: replacement of soils and protection of landforms planned to maintain the cultural and natural significance.
- Recommendations for the restoration or modification of any biological surrounds, e.g., replacement of the Indigenous and exotic plant species on the site.
- Include a list of references that you have used

APPENDIX 2. WORKPLAN 0809

Risk IHP Criteria	Type of Place	Potential Impact/Harm	DLMAC Activities	Specific Actions What will we do?	Period Undertaken When will we do it?
Feral Animals IHP 1	Archaeological sites (middens, stone arrangements) Macassan sites	Excessive disturbance to the fabric of heritage places	Fence construction	Fence replacement Wirrawuy and Galuru	1st half
	Sacred Sites		Monitoring	Sacred site surveys Bremer Island	1st half
	Historic Sites		Feral animal eradication	Maintain fences at Wurrwurrwuy	1st half 2nd half
	Traditional resources				
Visitation IHP 1	Archaeological sites (middens, stone arrangements) Macassan sites	Impact to fabric of archaeological sites	Signage	Implement Dhimurru Interpretation Strategy Signs on entry to all designated recreation areas	1st half
	Sacred Sites: land & sea	Transgression of traditional law and entry to sacred areas resulting in fatal outcomes	Permits	Develop permit system for access through litoral zone depending on outcomes of Blue Mud Bay	2nd half
				Provide detailed information to protect sites in conjunction with issuing recreation area access permits	1st half 2nd half
				Undertake weekly patrols aiming to visit all management areas at least once per month	1st half 2nd half
	Historic Sites	Social consequences for custodians	Protocols	Refine protocols for consultation with site custodians	1st half 2nd half

Risk IHP Criteria	Type of Place	Potential Impact/Harm	DLMAC Activities	Specific Actions What will we do?	Period Undertaken When will we do it?
			Monitoring	Undertake weekly patrols aiming to visit all management areas at least once per month	1st half 2nd half
			Garma	Deliver interpretive tour program at Garma	1st half
			Governance	Review Dhimurru constitution and adopt new constitution	1st half 2nd half
				Convene Committee meetings every two months	1st half 2nd half
Erosion IHP 1	Archaeological sites (middens, stone arrangements)	Impact to fabric of archaeological sites	Road & track maintenance	Undertake road and track maintenance activities as required	1st half 2nd half
	Macassan sites	Impact to the aesthetic quality of sacred sites – cause distress to traditional owners	Erosion control	Undertake erosion control works as required.	1st half 2nd half
				Close access to the Datula registered sacred site and implement alternative access to Wanuwuy and Cape Arnhem	2nd half
	Sacred Sites: land & sea		Weeds	Undertake weed control targetting Mission Grass in particular approx 10ha	2nd half
	Historic Sites				
Fire & Weeds IHP 1	Archaeological sites (middens, stone arrangements)	Impact to fabric of archaeological sites	Weeds eradication		

Risk IHP Criteria	Type of Place	Potential Impact/Harm	DLMAC Activities	Specific Actions What will we do?	Period Undertaken When will we do it?
	Macassan sites	Destruction of tamarind trees	Feral animal eradication	Opportunistic destruction of buffalo and pigs	1st half 2nd half
	Sacred Sites	Impact to traditionally significant monsoon vine forests	Fire Management	Develop GIS mapping system for recording and monitoring fire history	2nd half
				Undertake customary burning activities adjacent to monsoon vine forests	2nd half
	Historic Sites	Impact to traditionally significant resource areas			
	Traditional resources				
Loss of Traditional Knowledge IHP 1	Archaeological sites (middens, stone arrangements, Macassan sites)	Loss of knowledge regarding the location of sites, cultural significance, traditional rights and responsibilities	Ethno-ecology	Undertake surveys of important resource areas within Melville Bay recording resources utilised and their significance	2nd half
IHP 2	Sacred Sites: land & sea		Sea Country Mapping	Sea bed mapping in the vicinity of sacred sites adjacent to Bremmer Island	2nd half
IHP 2.5	Historic Sites			Design and begin to populate a historic sites register	2nd half
IHP 4	Traditional resources				
Threats to Traditional Resources IHP 2	Totemic Species: Flora and Flora	Loss of species significant to Yolŋu tradition (e.g., Baru and other sacred totemic species)	Turtle and Dugong	Implement a management program for turtle and dugong	1st half 2nd half

Risk IHP Criteria	Type of Place	Potential Impact/Harm	DLMAC Activities	Specific Actions What will we do?	Period Undertaken When will we do it?
IHP 3			Ghost nets and Marine Debris	Undertake campaign actions to remove Ghost nets from identified locations 7km to treat	2nd half
			Ethno-Ecology	Undertake surveys of important resource areas within Melville Bay recording resources utilised and their significance	2nd half
			Sea Grass and Seabed	Undertake training to effectively survey extent of sea grass beds and changes over time	2nd half
Ineffective utilisation of funding resources or poorly reported outcomes All Categories	All	Outcomes not achieved or achivementis not understood	Thorough review of Heritage management cataloguing of resources, planning	Undertake comprehensive consultancy	1st half initiate 2nd half complete