



Dhimurru

Indigenous Protected Area Management Plan

2015 – 2022

Prepared by Dhimurru Aboriginal Corporation

DHIMURRU INDIGENOUS PROTECTED AREA (IPA) MANAGEMENT PLAN

2015 – 2022

DHIMURRU

Prepared by Dhimurru Aboriginal Corporation

August 2015

Copyright

Dedication of this Management Plan to Djawa Yunupingu: Senior Gumatj Leader and Traditional Owner.

Dhimurru dedicates this plan in honour of the valuable service and commitment provided by Djawa Yunupingu. Djawa was an original Ranger and has been with Dhimurru since its inception in 1992. Djawa worked his way up through the ranks and assumed the role of Managing Director and although he is no longer an employee of Dhimurru, he still serves the organisation through his position on Dhimurru's Board. Djawa's dedication, his extensive and detailed knowledge, his good humour and inclusive approach are attributes that have helped to shape Dhimurru and have contributed hugely to Dhimurru's success.



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ACN: 520 121 809

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This document was prepared by Dhimurru Aboriginal Corporation, with assistance from Dermot Smyth and Acacia Prince-Pike (Smyth and Bahrtd Consultants) and designed by Rangs Graphics and Design (<http://rangsgraphics.com/>). The project was managed and coordinated by Dhimurru Facilitator, Vanessa Drysdale.

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Images of deceased people

Aboriginal and Torres Strait Islander people are advised that this document may contain images of deceased people.

Acknowledgments

Dhimurru wishes to acknowledge and sincerely thank all of the Yolŋu Traditional Owners who contributed their ideas, concerns and knowledge during the development of this Management Plan.

Thanks and appreciation also to the government and non-government members of the Dhimurru IPA Advisory Group for their contribution to the planning process and their feedback on earlier drafts of this document.

Also, Dhimurru would like to thank Professor Nancy Williams and Greg Wearne for providing critical feedback and direction during development of this plan.

Finally, thanks to the hard working Dhimurru Rangers, Facilitators, Administration and Executive staff, past and present. With patience, understanding and respect, both in the office and on the ground, all of Dhimurru's staff have worked together to make the organisation the success it is today.

Njilimurru bukmak djäka wänawu.

All of us together looking after country.

Photo credits

All images unless stated otherwise are property of Dhimurru Aboriginal Corporation. Special thanks to Vanessa Drysdale, Xanthe Rivett, Jess Roeger, Lisa Roeger, Isabel Beasley, Rachel Groom, Peter Eve and the Dhimurru Rangers for collecting and generously sharing the images within this publication.

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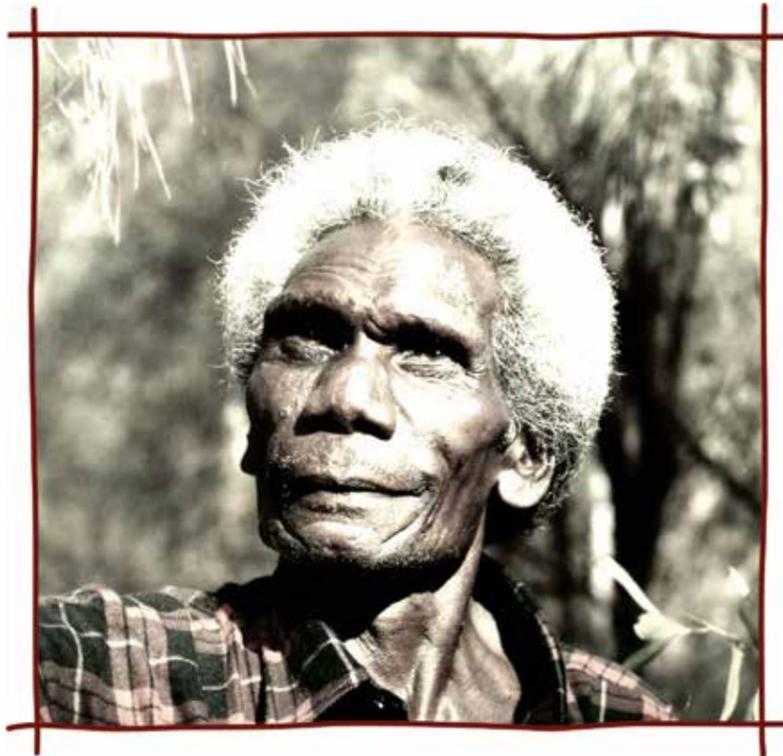
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FOREWORD

As always, we are very humbled by the support, patience and guidance of our partners, advisors and friends. All of the collaborating organisations have whole-heartedly supported the concept of a multi-stakeholder governance framework through which we can all care for the Dhimurru IPA. The Wāṅa Waṅaṅu (Senior Traditional Owners and Custodians) are our ultimate authority and guide, they are the ones who set our strategic direction and ensure we are travelling on the right path.

Other contributors, experts and advisors who had critical input into our plan include Dr Dermot Smyth and Acacia Prince-Pike who wrote the plan, Dhimurru Chair Rarrtjiwuy Melanie Herdman, Professor Nancy Williams and Greg Wearne who provided invaluable technical advice and the Dhimurru staff involved in managing the plans development; Vanessa Drysdale, Steve Roeger, Djalinda Ulamari, Wurrulṅa Marika and Juliet Perry.

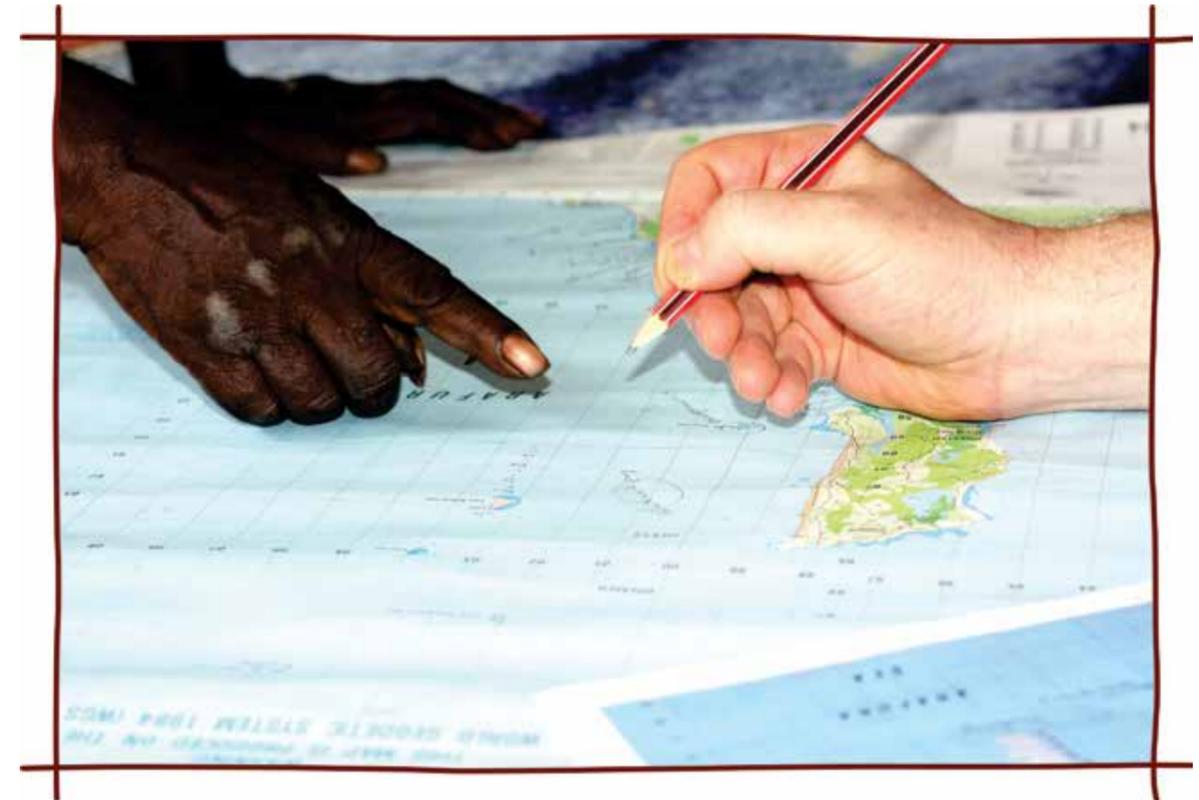
We are very proud to present the Dhimurru Indigenous Protected Area (IPA) Management Plan 2015-2022 and we look forward to working *bukmak* (together) to *djākami* (care for) our land and sea country, to nurture and support the rich cultural landscape and ensure its health and resilience is maintained into the future so our children can continue to gain physical and spiritual nourishment from the country in the same way we have done forever.



PURPOSE OF MANAGEMENT PLAN

The aims of this Management Plan are to provide:

- An overall **management framework** for Dhimurru to sustainably manage land and sea country as an IPA on behalf of, and under the direction of, Yolṅu Traditional Owners and Custodians
- **Management direction and guidance** for Dhimurru's Ranger, research, communication, collaboration and liaison operations during the period 2015 to 2022;
- Prescriptions for **managing visitor access** in designated recreational areas set aside for this purpose by Traditional Owners and Custodians;
- **Information for collaborators and partners** to help them understand how best they can work with Dhimurru to manage the IPA using their respective authorities, commitments and resources while achieving their own goals and obligations.



PLAN STRUCTURE

This Management Plan comprises the following three parts:

Part 1: Overview of the Dhimurru IPA comprises a series of posters summarising the key features of the Dhimurru IPA and its management.

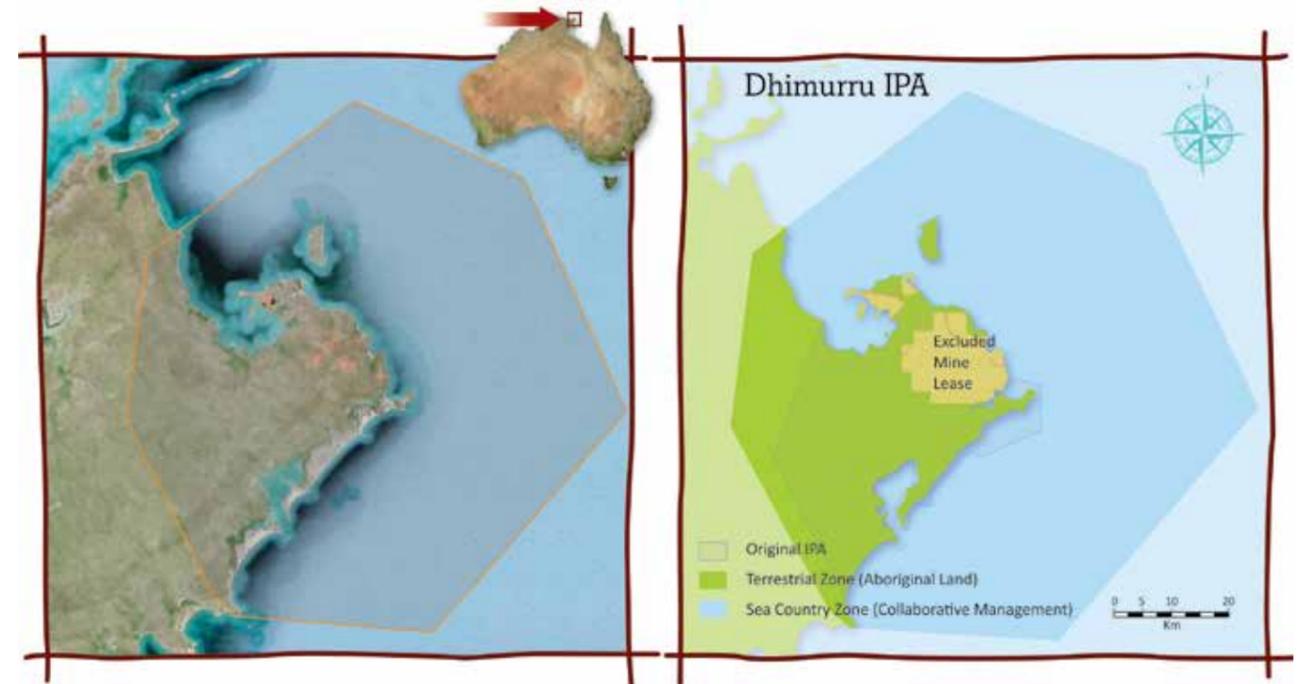
Part 2: Understanding and Managing the Dhimurru IPA provides detailed information on the values of the IPA and the management actions that will be taken to respond to various threats, challenges and opportunities relating to those values;

Part 3: Operational Plan brings together the management actions outlined in the various sections of Part 2 to provide an easily accessible guide for all Dhimurru staff and collaborating agencies to develop and implement their annual, monthly and weekly operational plans and actions.

The Management Plan concludes with a list of **References and Further Reading** and several **Appendices** that contain supporting information for various sections of the Plan.



PART 1: OVERVIEW OF DHIMURRU INDIGENOUS PROTECTED AREA



- Dhimurru Timeline
- Governance
- Cultural Heritage
- Conservation Significance
- Threats and Responses
- Livelihoods
- Learning on Country



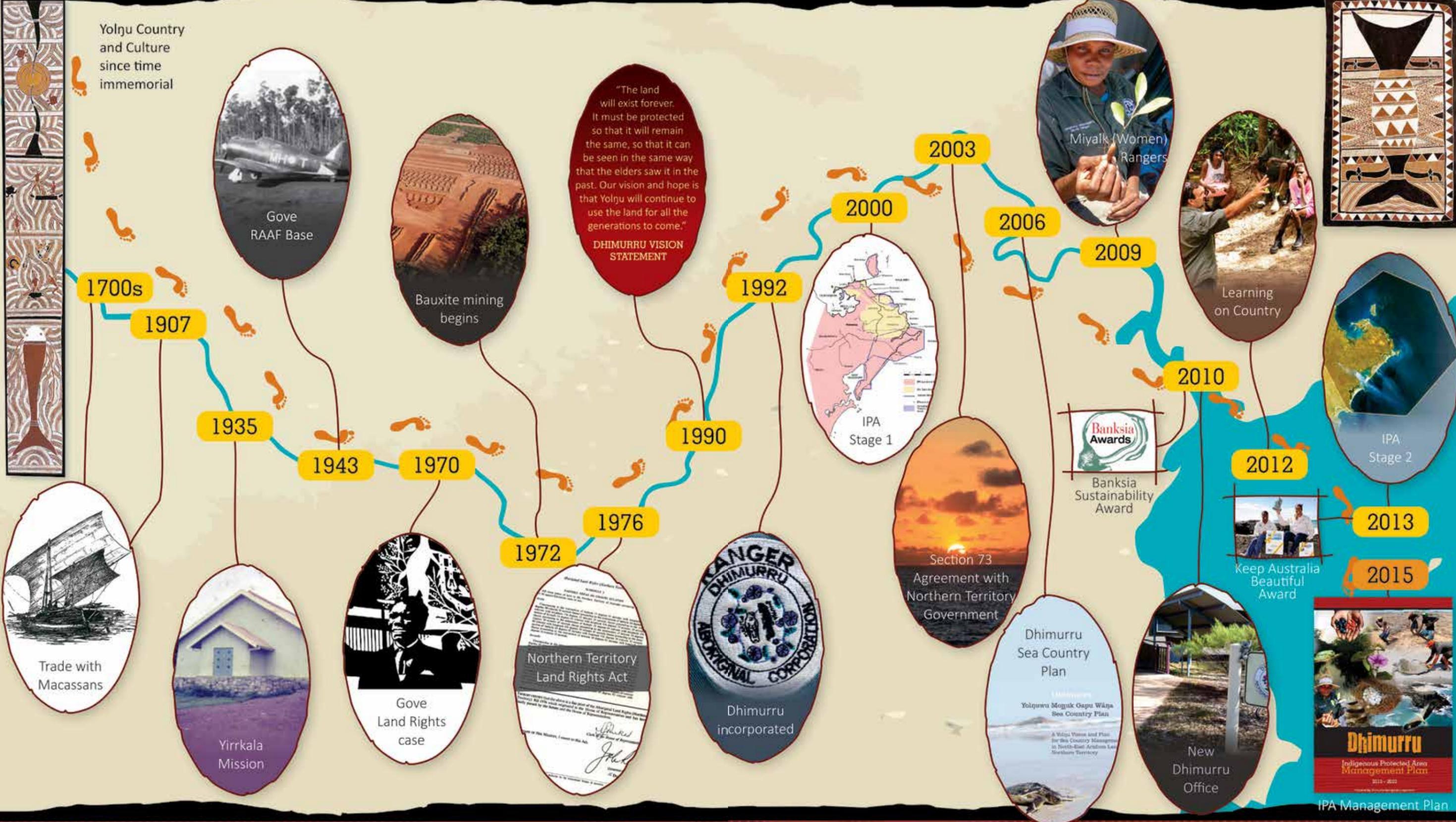
Dhimurru IPA Timeline



- Yolŋu control and empowerment
- Collaborative Partnerships

- ### Guiding Principles
- Both ways management
 - Conserve & enhance IPA values

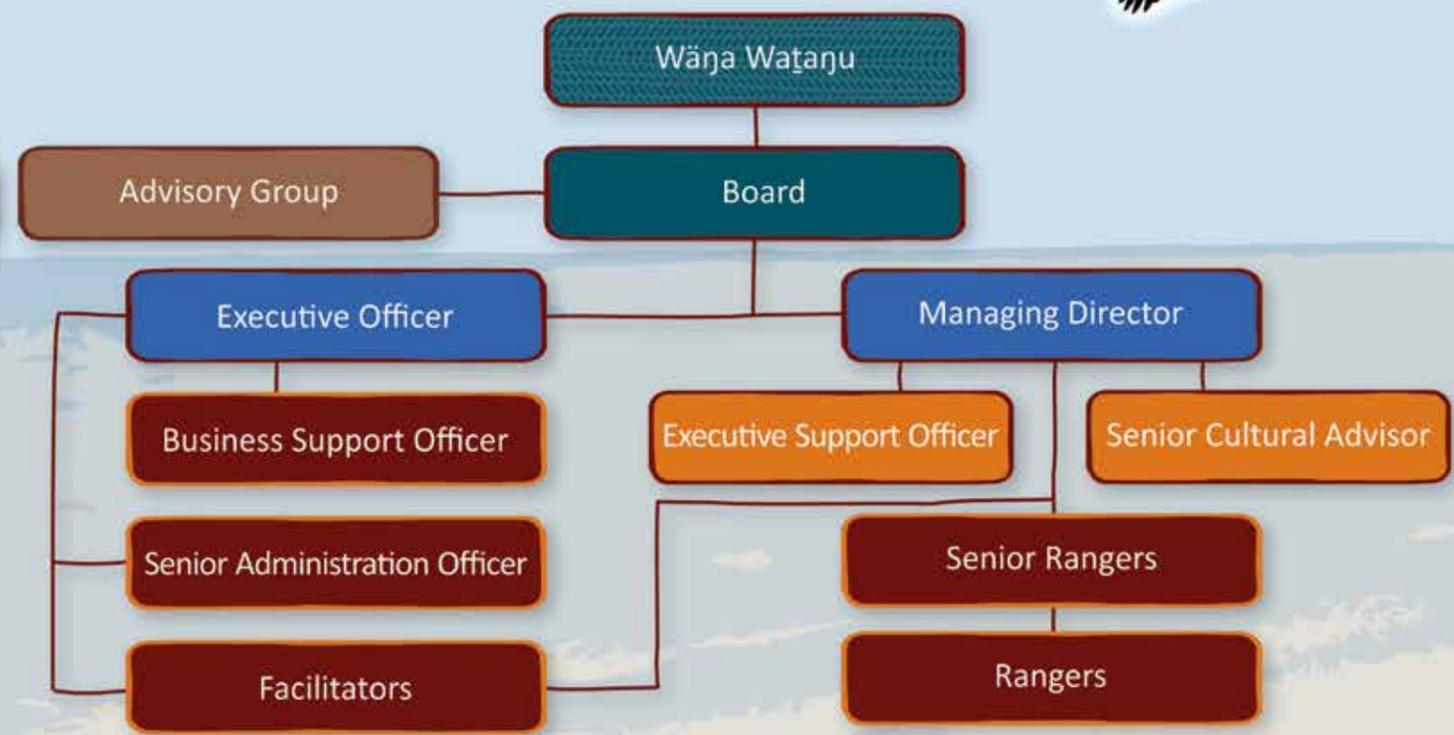
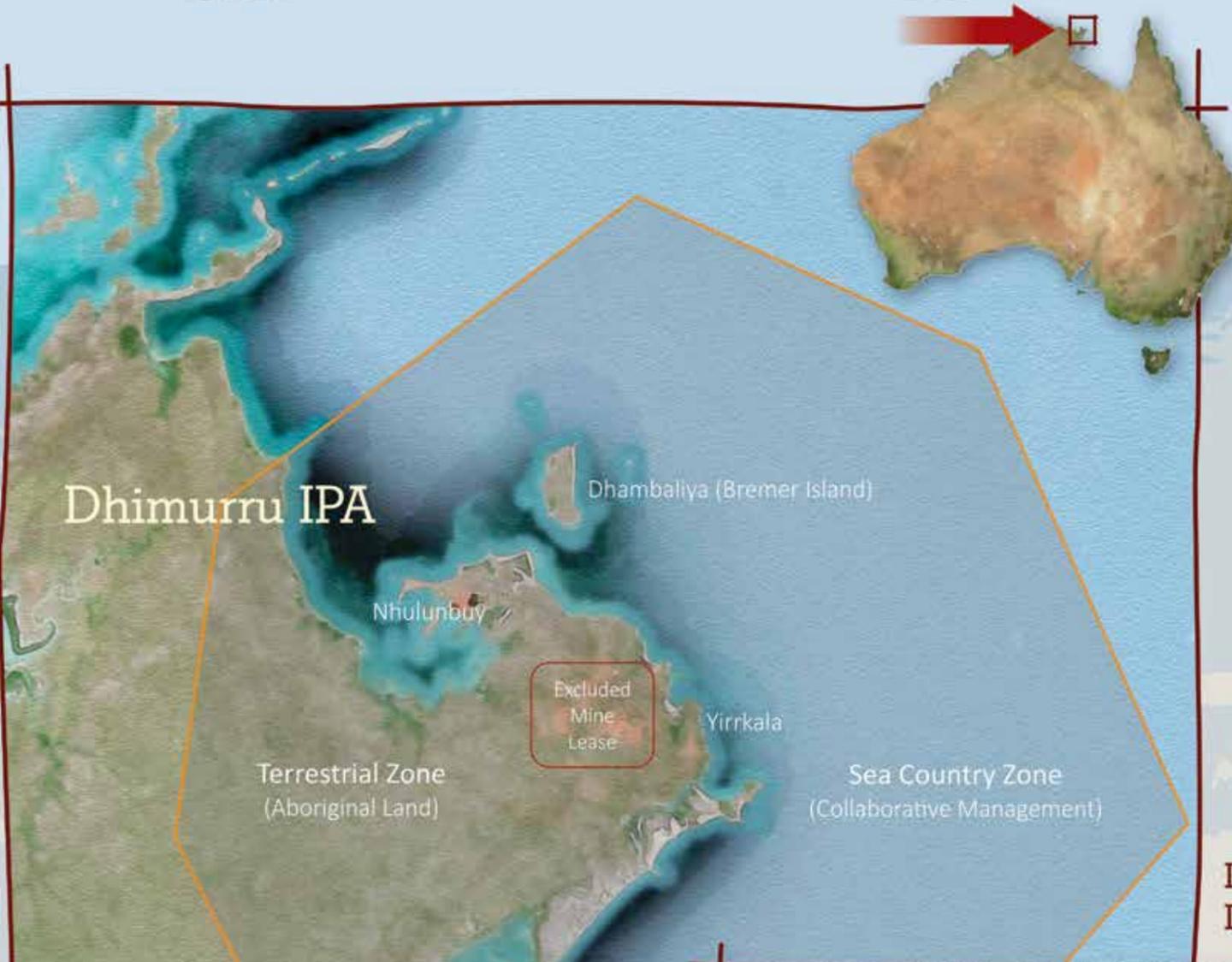
- Respect for Yolŋu values
- Naŋaki recreation values





Dhimurru IPA

Governance & Management



Dhimurru staff with IPA Advisory Group members

IPA Advisory Group

- Australian Government**
 - Department of the Prime Minister and Cabinet
 - Department of Agriculture
 - Department of the Environment
 - Australian Fisheries Management Authority
 - CSIRO
- Northern Territory Government**
 - Parks and Wildlife Commission of the Northern Territory
 - Northern Territory Department of Primary Industry and Fisheries
 - Northern Territory Department of Land Resource Management
- AFANT**
 - Yirrkala Rangers
 - Amateur Fishermen's Association of the Northern Territory
- Northern Territory Seafood Council**
 - Northern Territory Seafood Council
- MPP Industry Pty Ltd**
 - Northern Prawn Fishery Industry Pty Ltd
- Northern Land Council**
 - Northern Land Council
- EALTA**
 - East Arnhem Land Tourism Association



Heritage Values of Dhimurru IPA



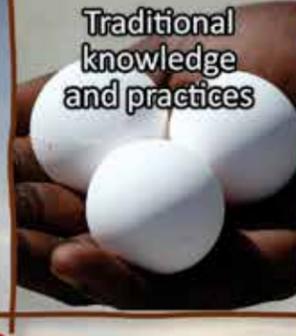
Shared Macassan Heritage



Macassan ship painting



Art and craft



Traditional knowledge and practices

Shared European Heritage



Yirrkala Mission

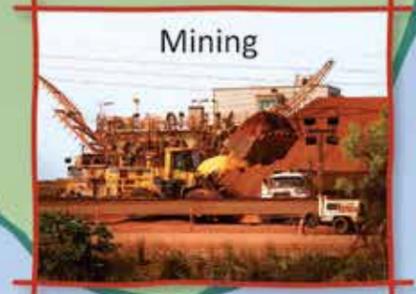


Nhulunbuy Township



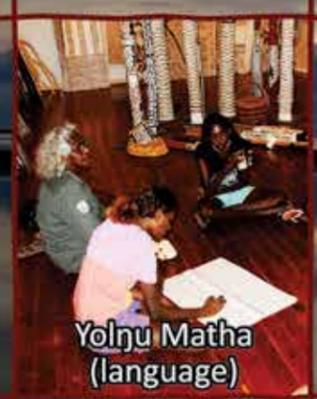
WW II Airfield

WORLD WAR II AIRFIELD GOVE



Mining

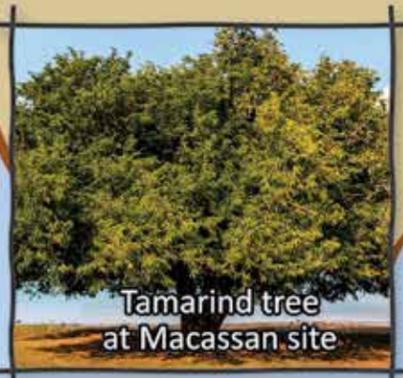
Yolŋu Heritage



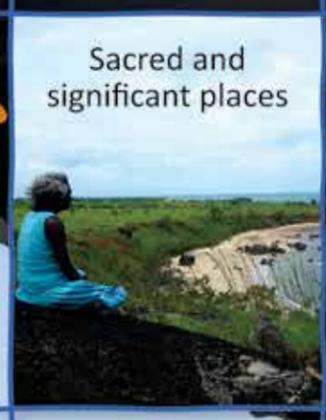
Yolŋu Matha (language)



Ceremony



Tamarind tree at Macassan site



Sacred and significant places



Connection to country



Culturally significant species



Conservation Significance of Dhimurru IPA

Ecological Diversity

Local, National and International Significance



- Spectacular rocky and sandy coastlines and islands
- Dune fields and beach ridge plains
- Bauxite plains and tall open eucalypt forest
- Numerous patches of monsoon forest
- 13 frogs, 76 reptiles, 207 birds, 35 mammals
- Most extensive and diverse coral reefs in the NT
- Diversity of fish, sea snakes and other marine life

- NT Conservation Site of International Significance
- Five sites on Register of National Estate for natural values
- Overlaps with Wessel Commonwealth Marine Reserve
- 18 threatened species
- Many species endemic to NT
- Nesting sites of four marine turtle species
- Breeding aggregations of terns and common noddy
- 54 migratory bird species
- Largely intact land and sea country environment

Large breeding colonies in the IPA

Roseate Tern
ḡurula

Rare plant first recorded at Yirrkala

Solanum
yirrkalense

Dugong
yinytjapana

One of the world's
rarest mammals

Snubfin dolphin
Buku Yolḡu

One of four marine
turtle species
breeding in the IPA

Green Turtle
marrpan

Saltwater Crocodile
bāru

Gove Crow Butterfly
Bonba

Only found in
northwest Arnhem

Photo: Dr Michael F. Braby



Unsustainable Use

- Monitor resources
- Collaborate with users and managers
- Support compliance



- Weed control and eradication
- Prevent introduction
- Focus on mission grass
- Monitor and control buffalo and pig numbers
- Monitor and eradicate yellow crazy ant outbreaks



Weeds and Feral Animals

- Require visitors to obtain permits
- Maintain Designated Recreation Areas
- Fences and signage
- Ranger patrols
- Beach clean-ups



Visitor Impacts



- Sea country patrols
- Marine debris removal
- Biosecurity monitoring in coastal areas and outstations



Marine Debris and Biosecurity



- Hazard reduction burns
- Monitoring fire plots
- Satellite fire scar monitoring
- Fire management plan



Changing Fire Regimes



- Site protection
- Support for ceremony
- Recording and applying Traditional Knowledge
- Learning on Country
- Inter-generational knowledge transfer



Loss of Cultural Knowledge

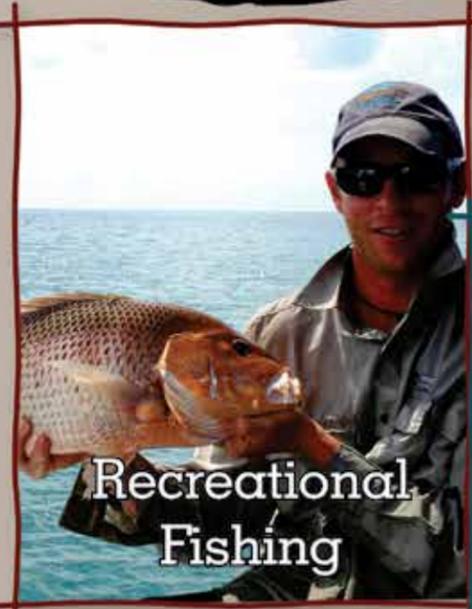


Livelihoods in Dhimurru IPA

Sustainable Use

Protecting Country and Culture

Sharing Resources



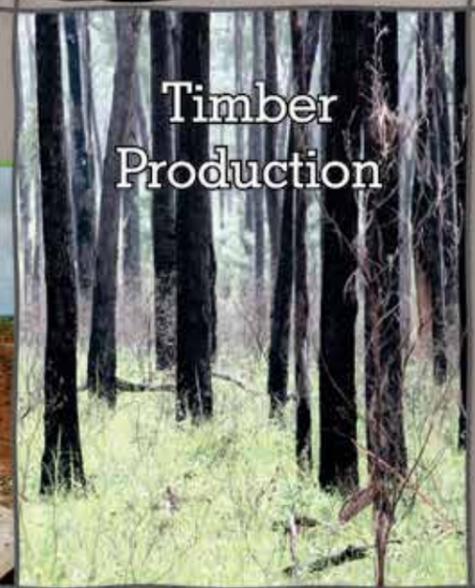
Recreational Fishing



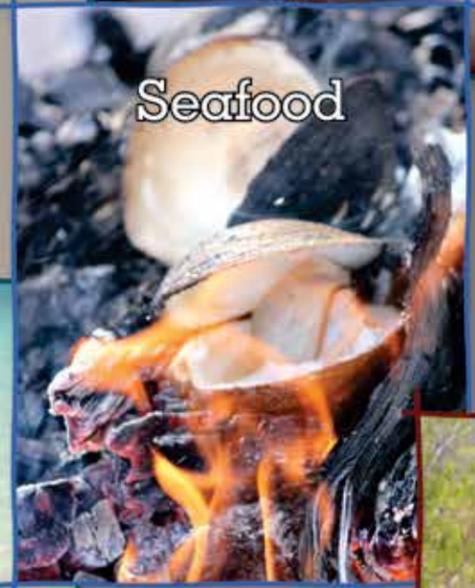
Research



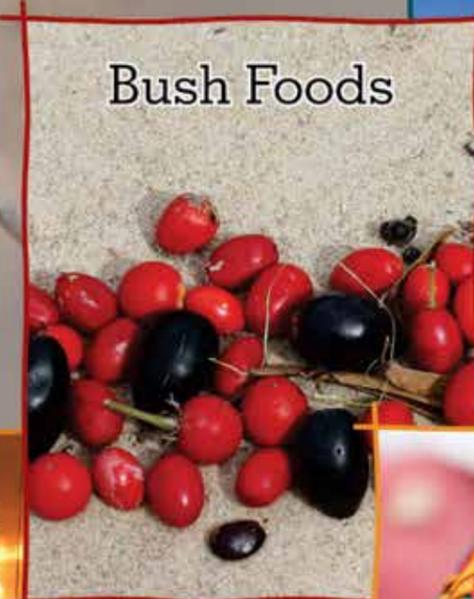
Tourism



Timber Production



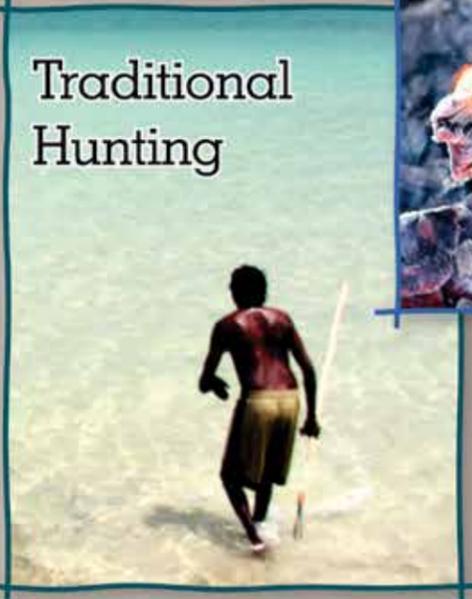
Seafood



Bush Foods



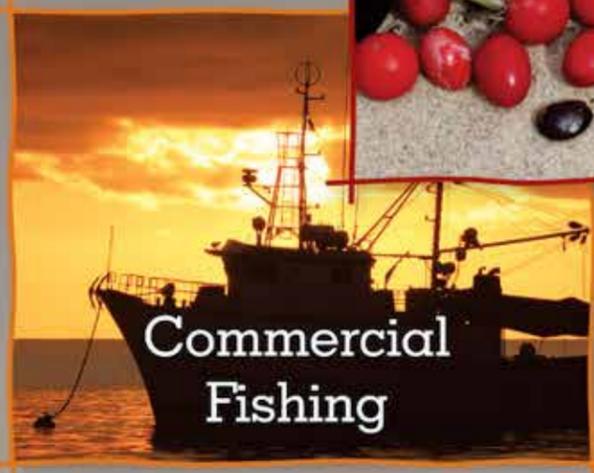
Shipping



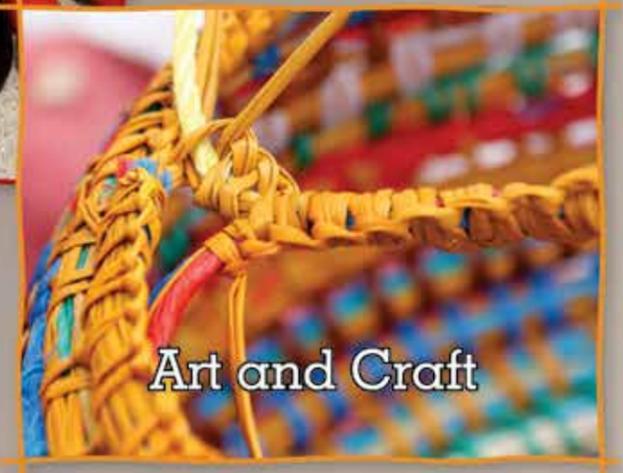
Traditional Hunting



Ranger program



Commercial Fishing



Art and Craft

In partnership with



Both ways education



Prepare future Yolŋu landowners for managing country



Kids in school

The Aim



Healthy and strong young people



Protecting local culture for future generations

Inter-generational knowledge transfer

Greater employability



Upskilled rangers



Classroom follow-up



Inspiration

The Results



Certificate of Conservation and Land Management



Inspired young people



Connection to country



On country learning



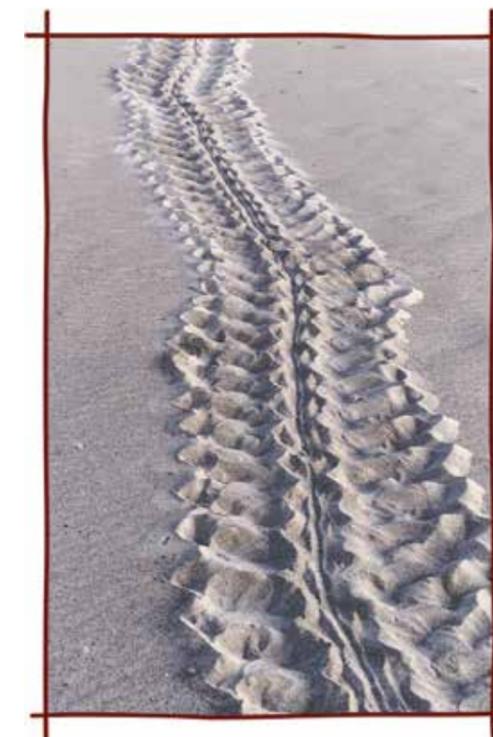
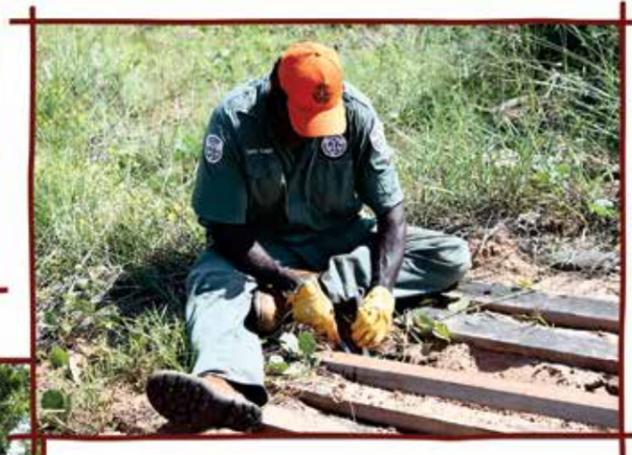
Yolŋu experts, rangers and teachers providing instruction

LOC in Action



Yolŋu foundation for mainstream curriculum

PART 2: UNDERSTANDING AND MANAGING THE DHIMURRU IPA



2.1 FUNDAMENTALS OF THE DHIMURRU IPA

Dhimurru Vision Statement

Dhimurru’s vision is guided by the wisdom of our Elders who founded Dhimurru. They have inspired us in our work. They exhorted us to look after our land and sea country for those who will follow, to protect and maintain it. In 1990 on behalf of the Elders Roy Dadayŋa Marika said, “Be firm and strong for the land, and the strength of your solidarity will sustain you in your cause.”

“Our country (land and sea) will exist forever. It must be protected so that it will remain the same, so that it can be seen in the same way that the elders saw it in the past. Our vision and hope is that Yolŋu will continue to use our country for all the generations to come.”

The Elders said, “We the old people hope that Dhuwa and Yirritja country will continue to be looked after through the connection of yothu yindi.”

“All our country is Yirritja and Dhuwa. Our songs, our law, our sacred art, our stories are embedded in our country, which is the foundation of our knowledge. That’s how we see our country; that is what our Land Rights Act says.”

“The decision-makers are the landowners, the clans that are connected through Yothu Yindi and Māri-Gutharra kinship. They have placed certain areas of our country in the hands of the Dhimurru Committee, which authorises the Dhimurru Rangers to manage and preserve, maintain and protect the areas designated for recreation use.”

“The landowners put the recreation areas in Dhimurru’s hands to manage. They envisage one committee, one voice, and one body under one umbrella, Dhimurru. Only Yolŋu will make decisions for this land, not government officials or any other person who is not a landowner.”

“We envisage working together with the Parks and Wildlife Commission and other IPA collaborators, especially in the management of our sea country; we need their help in making our vision a reality. But the only people who make decisions about the land are those who own the law, the people who own the creation stories, the people whose lives are governed by Yolŋu law and belief.”

What is an IPA?

The International Union for the Conservation of Nature (IUCN) defines a protected area as:

*“A clearly defined geographical space, recognised, dedicated and managed, through **legal or other effective means**, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”.*¹

An Indigenous Protected Area (IPA) is an area of land and/or sea country, dedicated by Traditional Owners and Custodians for the protection and management of natural and associated cultural values, through **legal and other effective means** in accordance with guidelines of IUCN, and recognised as part of Australia’s National Reserve System of Protected Areas.

In September 2012 the IUCN released new guidelines for the establishment of protected areas in coastal and marine areas² in which the Dhimurru IPA is listed as an example of how the term **“legal and other effective means”** can be applied to a coastal and marine protected area established by an Indigenous group. A more detailed explanation of how the Dhimurru IPA complies with the IUCN protected area definition is provided in Appendix 1.

Most IPAs are wholly located on Aboriginal-owned land (referred to as tenure-based IPAs), while some, such as the Dhimurru IPA, also include sea country and/or other parts of country not under Aboriginal ownership (referred to as country-based IPAs).

The voluntary establishment of an IPA by Traditional Owners does not affect the ownership of Aboriginal land or impact on any legal rights of Aboriginal people or other stakeholders.

The Dhimurru IPA is one of more than 60 IPAs across Australia which contribute over 40% of the total National Reserve System estate.



Overarching IPA goals

The overarching goals for the Dhimurru IPA, which will be achieved through the strategies and actions outlined in the following sections of this Management Plan, are:

Goal 1:

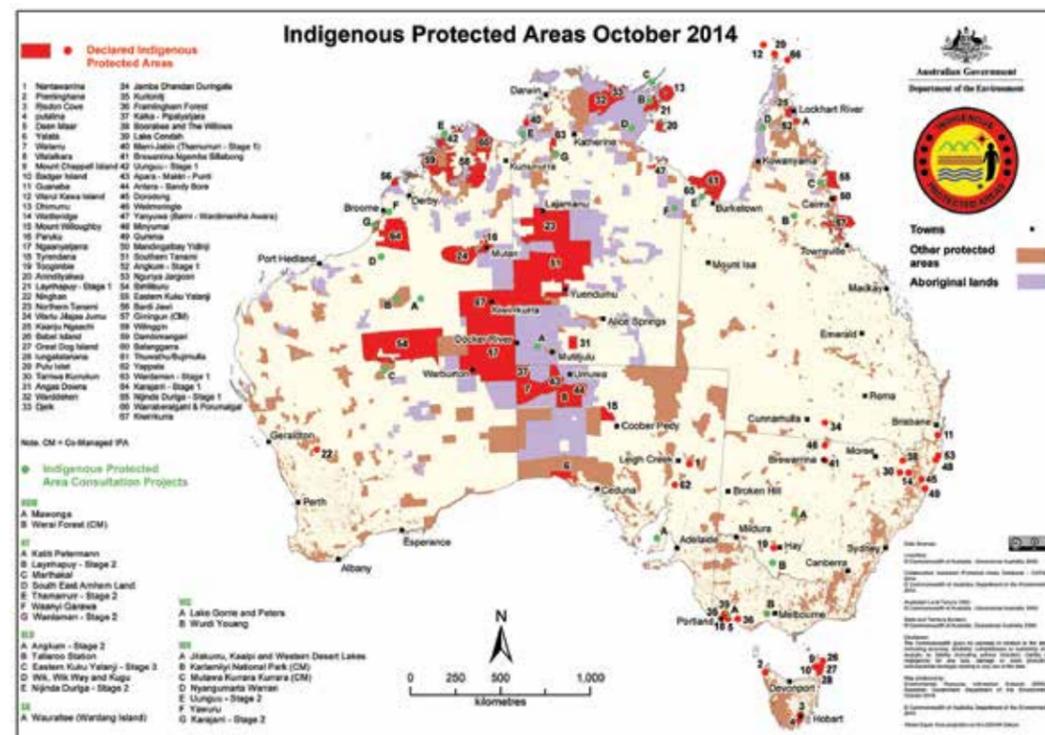
Conservation of the interdependent heritage values (cultural and natural) of the Dhimurru IPA;

Goal 2:

Sustainable Indigenous, commercial, and recreational use of the Dhimurru IPA.

These goals are consistent with IUCN’s protected area principle that conservation of natural and associated cultural values of a protected area must take precedence over human uses.

This is achieved in the Dhimurru IPA through the commitment of all collaborating agencies to the vision and goals of the IPA, as well as statutory and policy requirements of the Northern Territory and Commonwealth governments that fisheries and other human uses of ecological resources are ecologically sustainable.



1 Dhimurru Land Management Aboriginal Corporation (2008)
2 Day et al. (2012)



Guiding Principles for the Dhimurru IPA Management

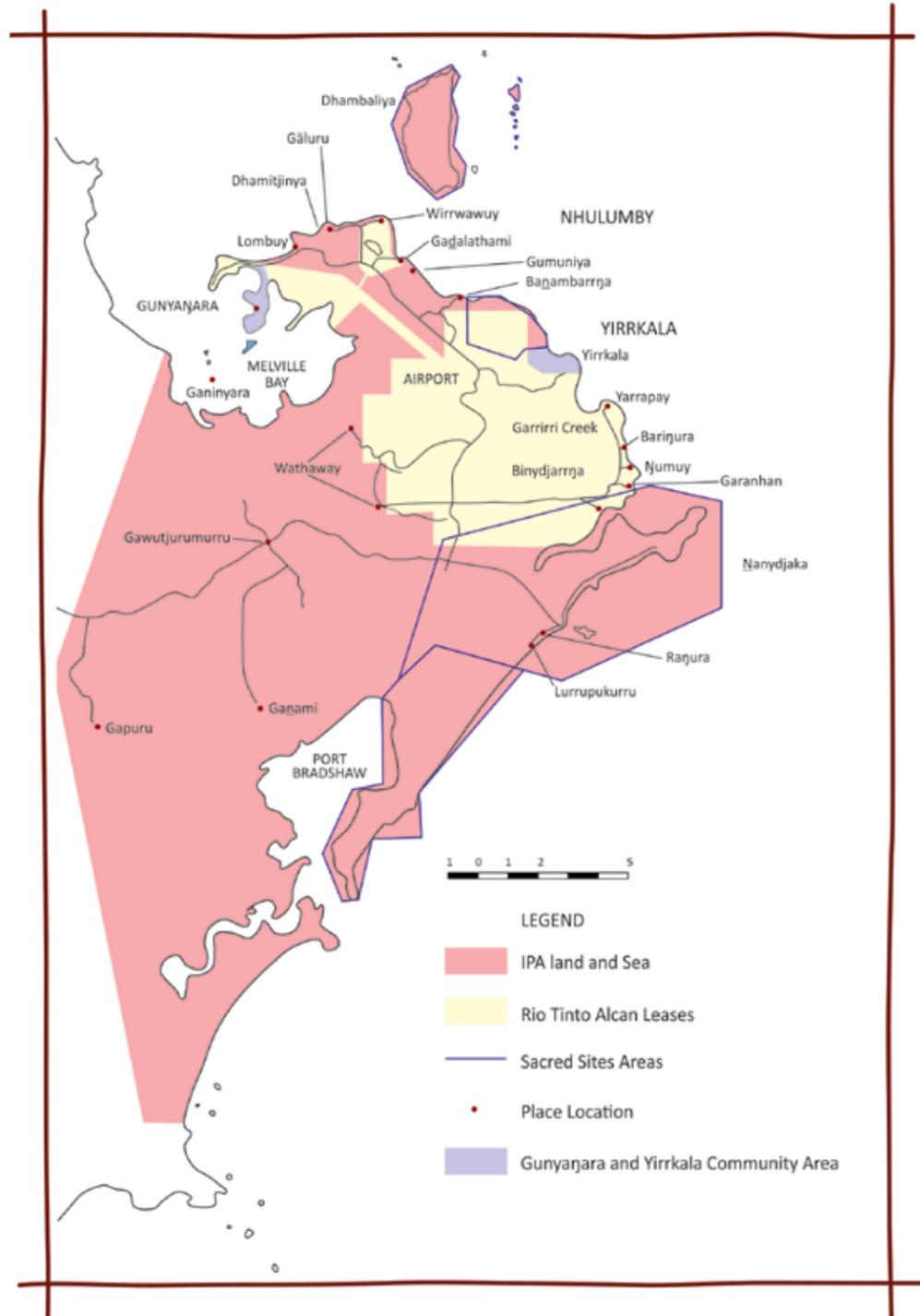
Through the wisdom of our Elders, the direction set by the Dhimurru Board and Executive and through the planning and management of our Rangers in collaboration with relevant agencies we are committed to the following principles in managing our land and sea country within the Dhimurru IPA:

- **Yolju control and empowerment** – Yolju make decisions for their own country. Activities should maximise opportunities for Yolju as active participants in the management of their country in the IPA;
- **Respect for Yolju values** – there are extensive and all-embracing values of all sites in the IPA for Yolju 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 Yolju management;
- **Both-ways management** – maximising opportunities for Yolju to devise strategies through a mutual investigation of Njapaki (non-Indigenous people) and Yolju systems of knowledge;
- **Collaborative relationships** – continued development of collaborative relationships with government agencies and other organisations in programs and research to support sustainable use and management of Yolju land and seas;
- **Njapaki recreation values** – the goal of visitor management will be to encourage an appreciation of the cultural and natural values of the IPA by Njapaki to promote an enjoyable experience and to ensure minimal environmental impact;
- **Caring for Dhuwa and Yirritja clan estates** – holistically in Dhimurru land and sea country consistent with our cultural values, rights, practices, and obligations;
- **Sacred sites protection** – protecting sacred sites and song cycles that contain our creation stories and which link our land and sea environments together;
- **Ecosystem maintenance** – maintaining healthy terrestrial and marine ecosystems in which all species and associated cultural values can thrive;
- **Sustainability** – ensuring that dugong, turtle, fish, and other culturally and economically important species are harvested sustainably for the generations to come;
- **Recognition of Yolju rights, interests and responsibilities** – ensuring that Yolju rights, interests and responsibilities in land and sea country are recognised and respected, together with the rights and responsibilities of other groups and organisations with a legitimate interest in our land and sea country and its resources;
- **Maintenance of Yolju knowledge** – ensuring that Yolju knowledge and practices are maintained and transmitted from one generation to the next;
- **Application of Yolju knowledge and practices** – applying Yolju knowledge and practices to the management of our land and sea country;
- **Best practice management** – ensuring best practice management of our land and sea country long into the future;
- **Development of Yolngu Enterprises** – Support for environmentally and culturally sustainable enterprises.

2.2 DEVELOPMENT OF THE DHIMURRU IPA

Dhimurru IPA Stage 1

When the Dhimurru IPA was declared in 2000 it comprised an area of approximately 101,000 ha surrounding Nhulunbuy in northeast Arnhem Land, including 9,000 ha of sea country – the first land/sea IPA in Australia.³ The map below shows the area of land and sea included in the 2000 IPA declaration, with areas registered as marine sacred sites through the *Northern Territory Aboriginal Sacred Sites Act 1989* (NT) shown in blue outline.



3 Dhimurru (2000)

Pursuing recognition of Yolŋu sea country

When the IPA was first established, only marine areas registered as sacred sites could be included, even though our traditional sea country extended far beyond the boundaries of the registered sites and even though our cultural obligation is to manage land and sea together as Yolŋu country.

In the late 1990s Yolŋu artists created a collection of paintings to communicate the cultural, spiritual, and economic importance of sea country to the wider Australian public. The collection was taken on a national tour to galleries in Canberra, Perth, Sydney, Melbourne, and Alice Springs and the paintings were made available in book form as *Saltwater – Yirrkala Bark Paintings of Sea Country*.⁴ The sea country art works (see two examples below) were created and exhibited as a statement of Yolŋu rights to the sea, in response to increasing use of their sea country and marine resources by commercial and recreational fishers without any Traditional Owner formal involvement in sea country management at that time.

The paintings reveal Yolŋu saltwater country in many states, showing qualities of depth, surface and the sacred and often dangerous land just below the surface, the profound depths and the totemic life forms that inhabit these waters. All this water – both fresh and salt, both in the land and saltwater country – is sacred. The movement of these waters is enacted in ritual dance and narrated in the sacred song cycles. The life force for the Yolŋu, the essence of the Yolŋu and their Ancestors is carried in these waters and held in reservoirs at special locations in clan estates.⁵



Lamamirri Moŋuk by Deturru Yunupijū

Rirratjijū Dawu by Banduk Marika

4 Buku-Larrngay Mulka Centre (1999)

5 Andrew Blake, Art Coordinator, Buku-Larrngay Mulka Centre quoted from Buku-Larrngay Mulka Centre (1999)

In 2006 Dhimurru released Yolŋuwu Moŋuk Gapu Wäŋa Plan of Management, which outlines Traditional Owners' cultural connections and obligations to sea country in marine and coastal areas adjacent to the Dhimurru IPA Stage 1. The purpose of this document was to translate Yolŋu sea rights, which had been explained previously through the art collection, into a manifesto for Yolŋu engagement in managing sea country – through asserting and applying Yolŋu knowledge and practices and through collaboration with government agencies and others with an interest in Yolŋu sea country.

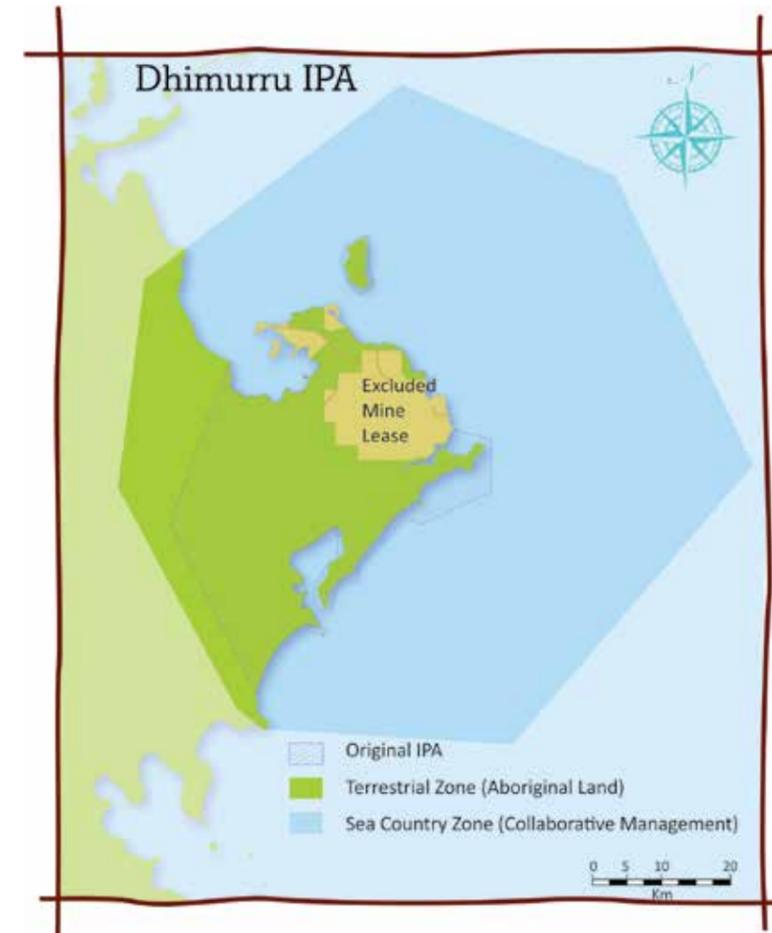


In July 2008, the High Court decided that Aboriginal Land Trusts have the right to control access to waters overlying Aboriginal land in the intertidal zone (*Northern Territory of Australia v Arnhem Land Aboriginal Land Trust* (2008) 236 CLR 24). The consequence of the High Court decision is that entry to waters overlying Aboriginal land for any purpose, not only fishing, requires permission from the relevant Land Trust. Negotiations have continued following the decision between the Aboriginal Land Trusts and the Northern Territory Government to provide a settlement for continued access to, and fishing in, the intertidal zone. An Interim Agreement was put in place to allow continued access without the need to apply for permission while negotiations for a long term agreement continued. We now have a formal arrangement in place covering much of the coastline of the Dhimurru IPA.

Dhimurru IPA Stage 2

In April 2013, after years of collaborative planning with government agencies and other marine stakeholders, Traditional Owners and Custodians dedicated an additional 450,000ha of sea country, as well as some additional land area, as part of the Dhimurru IPA. This dedication was made at the memorial service of one of our founding members, past Senior Cultural Advisor and very good friend Mr Dj Yunupirju.

In May 2013, at a ceremony at the World Indigenous Network Conference in Darwin, Ministers from the Commonwealth and Northern Territory governments formally recognised the expanded IPA as part of the global network of protected areas and committed the ongoing support of their respective agencies to work with us in managing our land and sea country as an IPA.



IPAs in Australia are typically allocated to either Category V (Protected Landscape/Seascape) or Category VI (Sustainable Use of Natural Resources). When the Dhimurru IPA was declared in 2000 it was allocated to Category V and the expanded IPA (Stage 2) remains in this Category. A detailed explanation of how IUCN protected area Category V applies to the expanded Dhimurru IPA is provided in Appendix 2.

While the IPA will be managed holistically as a single entity, two zones have been established to reflect the underlying tenures and authorities in the land and sea respectively. As indicated in the adjacent map, the expanded Dhimurru IPA is divided into two management zones:

- **The Terrestrial Zone**, comprising Aboriginal Land, where Yolŋu Traditional Owners and Custodians have sole responsibility for governance and management; and
- **The Sea Country Zone**, which is governed and managed through collaboration with government agencies and marine resource users.

The Terrestrial Zone extends inland to the headwaters of the streams that flow across the Dhimurru IPA, and includes intertidal land and water seaward to the lowest astronomical tide – consistent with the extent of Aboriginal land ownership under the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth), as confirmed by the Blue Mud Bay High Court decision in 2008.

While Dhimurru will seek advice and other support from collaborating partners for addressing management issues in the Terrestrial Zone, final decision-making remains with the Traditional Owners and Custodians of clan estates within this Zone.

The Sea Country Zone extends from the mean low water mark to the seaward boundary of the IPA, approximately 40 km from the coast. According to Yolŋu law and custom, Traditional Owners' cultural authority and responsibility extend throughout the Sea Country Zone. This cultural authority is augmented by statutory Indigenous fishing, hunting and collecting rights under Northern Territory and Commonwealth legislation, including:

- Section 53 (1) of the *Northern Territory Fisheries Act 1998* (NT);
- Section 122 of the *Territory Parks and Conservation Act 2006* (NT);
- Sections 303BAA and 359A of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth); and
- Native title rights and interests under the *Native Title Act 1993* (Cth).

Yolŋu cultural authority in sea country is further recognised through the statutory protection of registered marine sacred sites within the Dhimurru IPA under the Northern Territory Sacred Sites Act 1989 (NT).

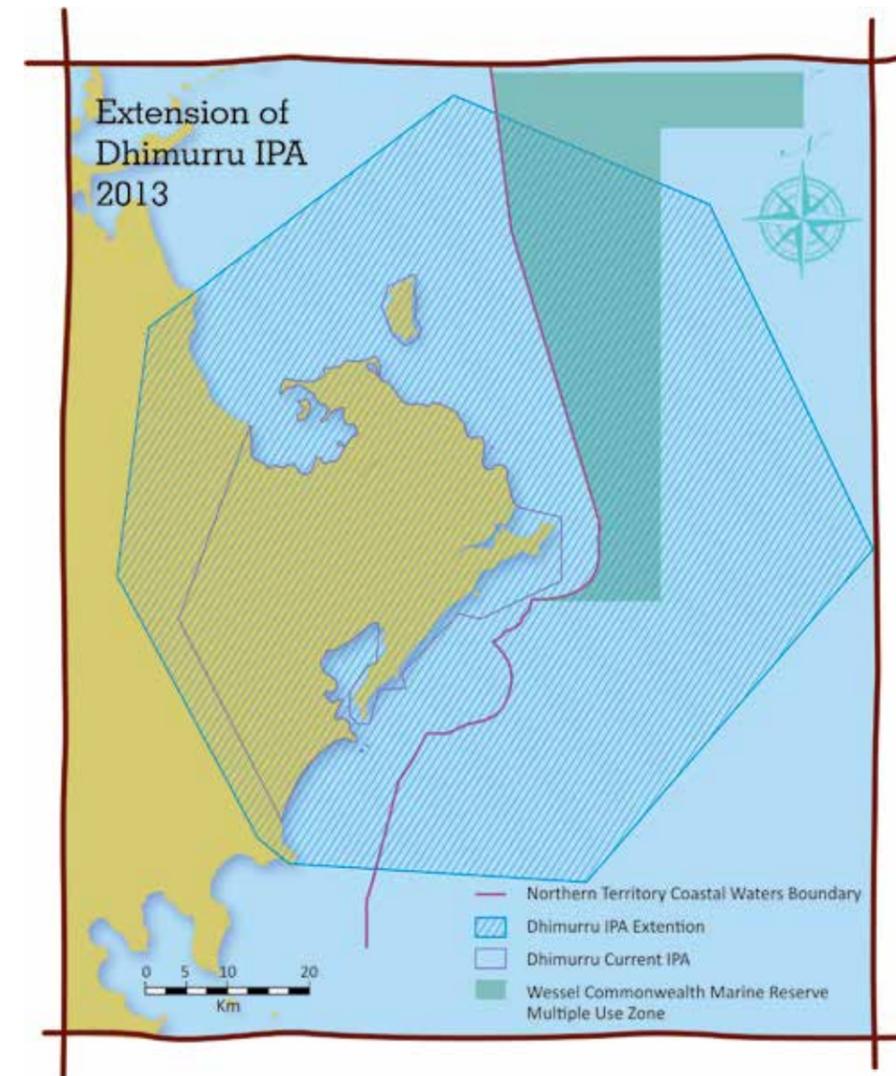
In addition and complementary to Yolŋu cultural authority and statutory rights as outlined above, we recognise that governments and marine resource users also have authorities, rights and interests in the Sea Country Zone of the Dhimurru IPA. These rights and interests include:

- Management of net, line, crab, shellfish and other coastal fisheries by the Northern Territory Government;
- Management of the northern prawn trawl fishery by the Commonwealth Government;
- Responsibility for conservation of marine fauna and flora, including endangered species by both the Northern Territory and Commonwealth Governments;
- Management of the Wessel Commonwealth Marine Reserve (which overlaps the Dhimurru IPA);
- Lawful right of licenced commercial fishers to take allocated catches within the Dhimurru IPA, in accordance with Northern Territory and Commonwealth fisheries policies, regulations, licence conditions and seasonal closure restrictions;
- Lawful right of recreational and charter fishers to catch fish within the Dhimurru IPA, in accordance with Northern Territory and Commonwealth fisheries policies, regulations, licence conditions and seasonal closure restrictions;
- Lawful right of public access to the Sea Country Zone of the Dhimurru IPA, subject to normal safety and transport regulations applying elsewhere in Northern Territory and Commonwealth waters.

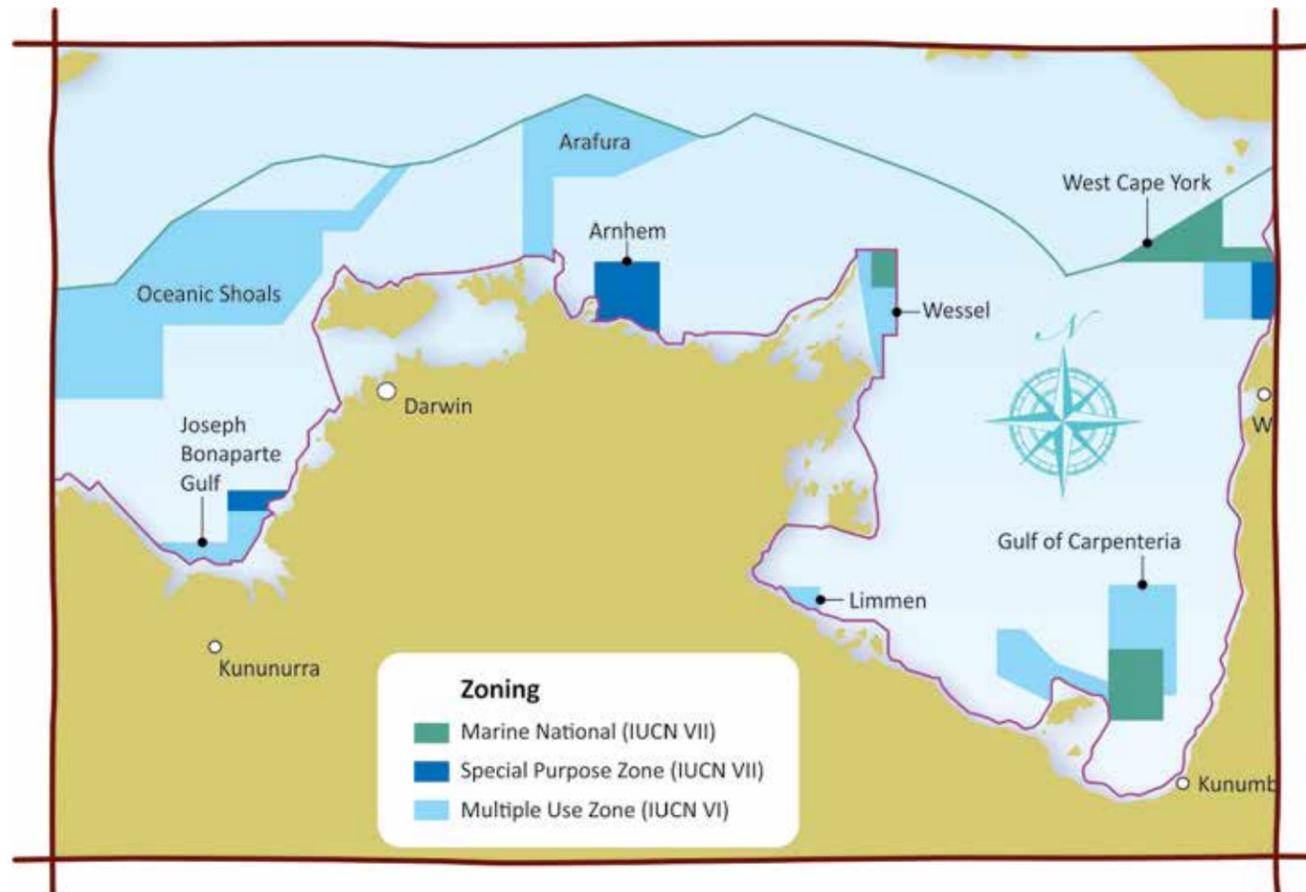
Wessel Commonwealth Marine Reserve

The Wessel Commonwealth Marine Reserve is situated to the east of Wessel Islands and extends south to offshore from Cape Arnhem, overlapping with the Dhimurru IPA (see map below). The 5,908 km² Marine Reserve has been divided into two zones, each with their respective IUCN protected area category:

- **Marine National Park Zone** – 1632 Km² (IUCN Category II);
- **Multiple Use Zone** – 4276 Km² (IUCN Category VI)



Map of North Commonwealth Marine Reserves Network with the Dhimurru IPA



The overlap of the southern portion of the Multiple Use Zone with the Dhimurru IPA provides opportunities for collaboration between Dhimurru and government agencies in the management of both the IPA and the Commonwealth Marine Reserve.

In the area of overlap of the Dhimurru IPA and the Wessel Commonwealth Marine Reserve there are two complementary IUCN protected area designations:

- **Dhimurru IPA:** Category V (Protected Landscape/ Seascape);
- **Wessel Commonwealth Marine Reserve:** Category VI (Sustainable Use of Natural Resources).

The primary objective of an IUCN Category VI protected area is:

*To protect natural ecosystems and use natural resources sustainably, when conservation and sustainable use can be mutually beneficial*⁶.

While this designation is compatible with the goals of the Dhimurru IPA, Traditional Owners and Custodians are committed to retaining the Category V designation for the entire IPA, including the area of overlap with the Wessel Commonwealth Marine Reserve in order to respect the Yolŋu holistic view of land and sea country and to highlight the interdependence of people, culture and environment that is central to the Category V designation. During the life of this Management Plan, Dhimurru will seek, in collaboration with the Commonwealth Government, to review the designation of the Commonwealth Marine Reserve and potentially re-assign the area of overlap with the IPA to IUCN Category V.⁷

The Wessel Commonwealth Marine Reserve is part of the North Commonwealth Marine Reserve Network comprising eight Marine Reserves in Commonwealth waters across northern Australia which were proclaimed as part of a national network of Commonwealth Marine Reserves in November 2012. The final management

plan for the North Commonwealth Marine Reserve Network was due to come into effect in July 2014. However, the Commonwealth Government is currently (2015) conducting a review⁸ of all the Commonwealth Marine Reserve management plans and it is unclear if and when a management plan will be put in place for the North Commonwealth Marine Reserve Network.

It is also unclear whether Strategy 6 of the suspended Commonwealth Marine Reserves Management Plan, which focuses on support for the involvement of Indigenous people in the management of Commonwealth Marine Reserves, will remain. This Strategy is provided in Appendix 3.

What the expanded IPA means

The expanded Dhimurru IPA (Stage 2) more accurately reflects Yolŋu understanding of the indivisible links between the land and the sea, and the links between all living things that depend on both terrestrial and marine environments. Furthermore, the need for integrated land and sea management is increasingly important as rising sea levels, resulting from climate change, are causing coastal erosion and saltwater intrusion into freshwater habitats.

Dedication of additional sea country as part of the Dhimurru IPA means a continuation of the IPA arrangements over land and sea that have worked well since 2000, over an expanded area of sea country with a more inclusive collaborative governance and management framework. It means that Yolŋu are recognised as Traditional Owners and Custodians of sea country and are committed to protecting, caring for, and sustainably using their land and sea country through:

- Traditional law and practices;
- Sea country patrols, research and monitoring;
- Negotiation and collaboration with neighbouring Ranger groups;
- Negotiation and collaboration with government agencies;
- Negotiation and collaboration with commercial and recreational fishers.

Dedication of the additional area of sea country as part of the Dhimurru IPA, which occurred in 2013, was a non-legal process – consistent with *“legal and other effective means”* provisions of the IUCN protected area definition. The dedication did not impact on any current authorities, licences, access rights, or use rights. The IPA does not give Traditional Owners and Custodians authority to restrict access to sea country, close fishing grounds, change bag limits, change commercial fishing boundaries/seasons or limit tourism operations. If any changes to current arrangements were to occur in the future they would do so through negotiation and agreement using existing legislation and interested parties’ participation processes. The collaborative governance and management arrangements associated with the expanded IPA complement and enhance these existing arrangements by providing a forum for communication and collaboration between Traditional Owners and Custodians, government agencies and other relevant stakeholders in the management of sea country where no such forum had previously existed.

In January 2014, a 20 year settlement was agreed for part of the IPA intertidal zone identified as *Intertidal Licence Area (2014-34)*. Further information regarding the agreement can be found at the Dhimurru website: www.dhimurru.com.au. The Intertidal Licence Area extends from the west side of Melville Bay across the coast of Nhulunbuy east to Cape Arnhem. The largest fishing interest in this area is from recreational fishers with some from fishing tour operators and minimal from commercial. The settlement provides terms and conditions to manage both access to and fishing in the Licence Area. The Licence Area authorises recreational, fishing tour operator and commercial licensees to enter and remain in the intertidal area and carry out any activities that are permitted under their associated licences, including taking the fish as long as they abide to rules and regulations as set out under the *Northern Territory Fisheries Act 1998*. The settlement includes provisions for Ranger operations in relation to the Licence Area.

Key provisions of the settlement in relation to the intertidal Licence Area are summarised in Appendix 7.

⁶ Day et al. (2012), p.23

⁷ Under section 367 (2) of the Environment Protection and Biodiversity Conservation Act 1999 (Cth)

⁸ <http://www.environment.gov.au/marinereservesreview/regional-review>, 30 Jan 2015

2.3 GOVERNANCE AND COLLABORATING PARTNERSHIPS

Seventeen clans from northeast Arnhem Land are represented in the membership of Dhimurru Aboriginal Corporation. Dhimurru is governed by an elected Board of 10 Directors who are Wāṅa Waṅaṅu Yolṅu (Traditional Owners) from these clans. The Board meets bi-monthly to make operational and administrative decisions on behalf of the members. They set the priorities for management for the region and in accordance with Dhimurru’s Guiding Principles and approved plans of management. Dhimurru refers directly to the Wāṅa Waṅaṅu regarding all decisions which may have a direct or lasting effect on their estates.

Supporting the operations of the Board, Dhimurru has developed effective collaborative governance of the IPA through the Dhimurru IPA Advisory Group. Membership of the IPA Advisory Group is open to all key government agencies and representative organisations with an interest in the Dhimurru IPA; membership may change over time in response to emerging issues and priorities. This collaborative approach is consistent with Traditional Owners’ commitment to ‘both ways management’ as expressed in Dhimurru’s Guiding Principles.

‘Both ways management’ refers to the recognition, nurturing and application of Yolṅu knowledge, values and practices together with contemporary scientific understanding, technologies and methodologies to achieve the goals of the Dhimurru IPA.

Each collaborating organisation brings to the IPA governance table their own “backpack” containing their unique combination of commitment, authority, responsibility, and capacity to contribute to achieving the goals of the IPA. Recognising the underlying differences in rights and interests in the Terrestrial Zone and the Sea Country Zone, the combined contents of the respective governance “backpacks” comprise the package of **“legal and other effective means”** that have been brought together to achieve effective governance and management of the expanded Dhimurru IPA. The contents of this governance package are summarised in Appendix 4.

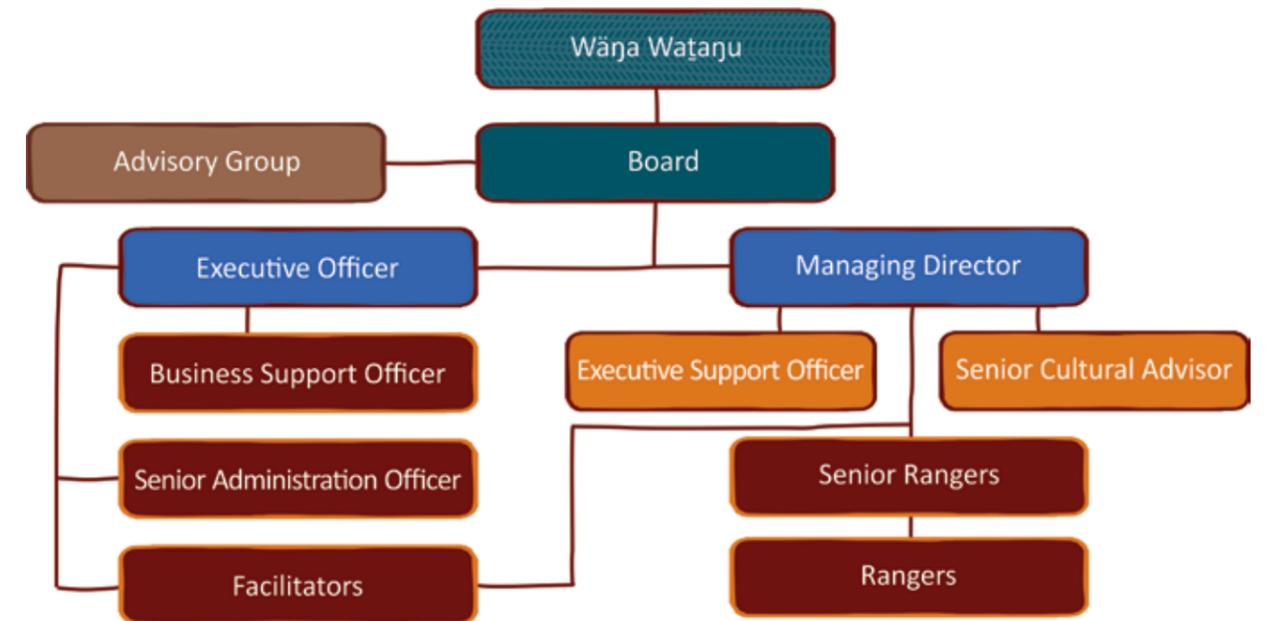
The governance arrangements now in place are an expanded version of the IPA Advisory Group that had contributed effectively to the management of the Dhimurru IPA (Stage 1) since its inception in 2000. The IPA Advisory Group meets at least twice per year, recognising that not all Advisory Group members will necessarily participate in every meeting, depending on agenda priorities, competing demands and funding constraints. Additional meeting of the Advisory Group will be convened on an “as needs” basis.

The inclusion of the intertidal Licence Area in the IPA area provides opportunities for collaboration with the Northern Territory Government, recreational fishers and the commercial fishing industry regarding the use and management of intertidal land, water, cultural heritage and resources.

With respect to management of the Sea Country Zone, the role of the Advisory Group is to provide a forum for advice, concerns, and information to be shared among all Advisory Group members to achieve the IPA goals and objectives through collaborative and individual efforts. Management of the Terrestrial Zone of the IPA will continue to be the sole responsibility of Traditional Owners and Custodians, supported by Dhimurru Rangers, with input from the Advisory Group as appropriate.

In addition to the Advisory Group members, who represent the Dhimurru IPA’s core collaborating partners, there are many other agencies and organisations who contribute in a wide range of ways (funding, technical support, resource sharing, expertise, policy development, training, mentoring etc.) to the management of the IPA.

The governance structure of Dhimurru Aboriginal Corporation and a list of collaborating partners current in 2015 is provided on the following page:



IPA Advisory Group

	Department of the Prime Minister and Cabinet Department of the Environment Department of Agriculture Australian Fisheries Management Association CSIRO
	Parks and Wildlife Commission of the Northern Territory Northern Territory Department of Primary Industry and Fisheries Northern Territory Department of Land Resource Management
	Yirralka Rangers
	Amateur Fishermen's Association of the Northern Territory
	Northern Territory Seafood Council
	Northern Prawn Fishery Industry Pty Ltd
	Northern Land Council
	East Arnhem Land Tourism Association



“Dhimurru is going very well looking after our country, our culture and identity in land and sea.”

Senior Gumatj leader

2.4 MANAGEMENT CAPACITY AND RESOURCES

Dhimurru has developed capacity for ongoing management of country since the inception of the organisation – through the training and education of Rangers and other staff, the building of infrastructure, the acquisition of appropriate vehicles, vessels and other equipment and the on-ground implementation of the “both ways management” approach with personnel from collaborating agencies. A summary of human resources and operational capacity in 2015 is provided below.

- Two fully qualified coxswains;
- Two restricted coxswains;
- Two Rangers with certificate II fisheries compliance;
- One Ranger and one Facilitator working towards certificate III fisheries compliance;
- All Rangers conversant with CyberTracker software;
- Most Rangers qualified in 4x4 driving, chain saw operation, chemical handling and radio telephony;
- All Rangers qualified in or studying for Conservation and Land Management certificates;
- All staff hold first aid certification and skilled to act as deck-hands on vessels;
- One Facilitator dedicated to Sea Country project co-ordination;
- Two Facilitators dedicated to terrestrial and cultural projects;
- Online permit system in place;
- In house radio communications system.

Vehicles:

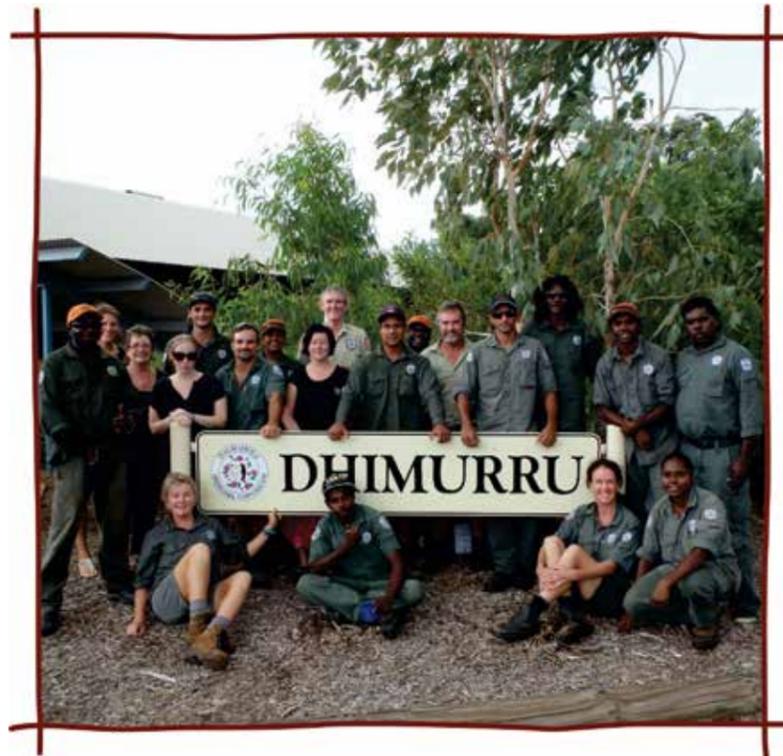
- Fleet of Toyota 4wds;
- Two Isuzu trucks;
- Forklift;
- Tractor.

Vessels:

- 7.5m Ocean Cylinder vessel “Sea Ranger 1” in 2C survey
- 3m inflatable Zodiac with 15hp outboard
- 3.8m aluminium run-about with 15hp outboard

Infrastructure:

- Undercover storage facilities for vessels and vehicles;
- Office complex including board room, training room, shed, and short stay accommodation.



Employment, training and staff development

“Our most valuable resource is our staff” – Steve Roeger, Dhimurru Executive Officer.

We have come a long way from the days when no-one wore a uniform to now having one of the most formidable forces amongst Indigenous Ranger groups in Australia. Dhimurru prides itself on its high standards and professional approach and quality of work. This work culture has manifested itself in the giant leaps the staff have made in effectiveness, community leadership and an overall sense of empowerment.

Ongoing employment and advancement of Yolŋu people is a key goal of Dhimurru. Training and professional development of all staff are critical to Dhimurru’s continued success. We recognise the importance of both Yolŋu and mainstream intellectual traditions to our work and we are committed to learning from each other. Knowledge and skills from the Yolŋu world must be informed by those from mainstream environmental resource management practice in the work of Yolŋu Rangers. This is a unique and developing role and we require support and flexibility from our primary education and training providers Bachelor Institute of Indigenous Tertiary Education (BIITE) and Charles Darwin University (CDU) to continue to expand and explore this role.

Our overall objectives are to increase formal training levels and to ensure that flexible, achievable career pathways are available for Dhimurru Yolŋu staff. Through training, we seek to extend output and efficiency and ensure that we have succession arrangements in place.



Senior Ranger Yupunu Fiona Marika. Proud winner of the Northern Territory Aboriginal and Torres Strait Islander Student of the Year Award 2014

Objectives	Actions/Targets	Priority	Timing
Cultural learning	All staff attend ceremonies where appropriate	High	Ongoing
	Facilitate staff participation in 'both ways' workshops	High	One per year
	Include cultural content when planning in-house training	Medium	2015 then ongoing
	Develop a training outline and delivery strategy on the cultural landscape at recreational areas	High	2016 then ongoing
	Sponsor Yolngu Matha Introductory study through CDU or similar	Medium	Ongoing
Training and career development	Seven Rangers achieve Certificate II in Conservation Land Management	High	2022
	Three Rangers achieve Certificate III in Conservation and Land Management	High	2022
Facilitate staff exchanges	Facilitate exchange opportunity to a location outside of Dhimurru	Medium	Once every two years
	Host a visitor exchange at Dhimurru	Medium	One per year
Improve work output and efficiency	Develop and monitor project work plans as part of annual forward planning process	High	Once a year
	Develop standard operating procedures for use of all equipment	High	2018
Improve compliance delivery	Three Rangers trained to Certificate II Fisheries enforcement	High	2018
	Two Rangers trained to Certificate III Fisheries enforcement	Medium	2020
	Host Fisheries Police visit to Dhimurru IPA	Medium	Minimum one per year
	Develop implementation protocols with relevant agencies	High	2018
Maximise Yolngu employment	Maximise the number of identified positions based on realistic assessment of candidates availability	High	Ongoing
	Encourage participation of staff in 'work readiness' programs such as RALPA and LoC and recognise achievements in recruitment	High	Ongoing

Expand Ranger services	Explore options for models which will most effectively deliver Ranger services to homeland communities	Medium	2017
	Develop a plan in conjunction with homelands to expand Ranger services to the communities	Medium	2019
Locating Rangers in Homelands	Explore models which could enable Dhimurru to locate a Ranger or Rangers in homelands.	Medium	2018

2.5 HERITAGE AND CONSERVATION SIGNIFICANCE

While others may distinguish between cultural and natural values of particular environments, we see all aspects of Country as part of our heritage – not only because that is our Law and tradition, but also because the current environments of the Dhimurru IPA have only ever existed in the presence of Yolŋu people. Our ancestors were here before the seas began to rise 18,000 years ago, flooding over our vast coastal plains and estuaries, providing habitat for seagrasses and food for the marine turtles and dugongs that followed.

We adapted to these great changes and we embraced the environments and ecosystems we see today as part of our heritage, our culture and our livelihood. These things were never separate from us and they are not separate today.

The Dhimurru IPA is shaped by Yolŋu culture so its environments comprise a holistic cultural landscape/seascape - a unique geographical area that is the combined work of Yolŋu people and nature,⁹ which cannot exist in isolation of each other.¹⁰

In recognition of this holistic view of the Dhimurru IPA as a cultural space, introductions to cultural heritage, environments, animals, plants and conservation significance are presented together in this section of the Plan. Other important values, such as commercial and recreational fishing, mining and tourism are presented in the following section on “Sustainable Livelihoods”.

Yolŋu culture

We are proud to share the following cultural information to assist our IPA collaborators and the wider community to better understand our relationship and obligation to our land and sea country and to better support our efforts to care for our country and resources that are important to us and to all Australians. The concepts and metaphors we share here are only indicative; it is beyond the scope of this document to explore the detail needed to fully understand or appreciate our relationships and obligations.

Ancestral Spirit Beings of the Dhuwa and Yirritja moieties created us and the known world – the celestial bodies, land, sea, living plants and animals. The journeys of these ancestral creators created our landscapes and seascapes and breathed life into all living things on our country. The origins of these ancestral beings, their behaviour as they crossed the landscape, their meetings with other ancestral beings and their resting places have marked our land and sea country with sites of great significance to us. From these ancestral journeys and the network of important sites created across the land and sea, we gain our names, our identity and our way of life.

We call up the names we have for important places in our land and sea country for different reasons and purposes – some are deep and secret. We celebrate and respect these creation journeys with their network of important sites in everyday life and in more serious ceremonial rituals. They link us to each other and our world, they connect us to our land and sea country and everything within it. Our stories do not work alone; we are endowed with art, dance, song and deep connectedness of kinship. We weave together the narratives of ancestral beings, important and sacred sites and creation activities across the lands of inter-related estate owning and language groups. All this is our cultural heritage, which gives us our society, our traditions of politics, history and knowledge and guidance on how to live in harmony with our land and sea country.

Indigenous cultural heritage 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.¹¹

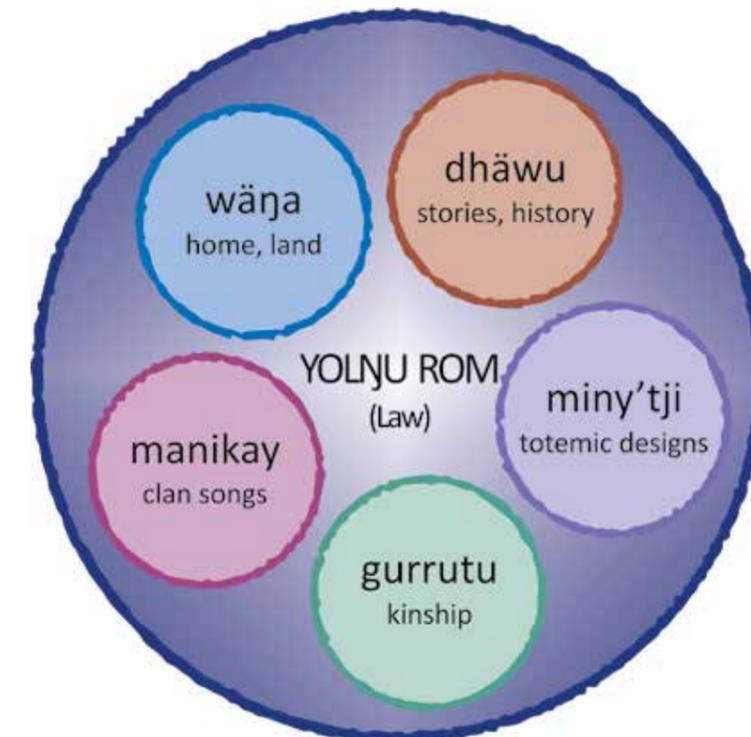
For Yolŋu Traditional Owners and Custodians the overriding value of the IPA is as a cultural space in which terrestrial and marine components, cultural beliefs, practices and obligations as well as animals, plants, ecosystems, and ecological services are integrated in a holistic world-view of “Country”.

9 UNESCO (2005)
10 Pannell (2006)
11 Australian Heritage Commission (2002)

Some aspects of our cultural heritage extend beyond the boundaries of the IPA, through our connections with neighbouring Traditional Owner groups, and through our Songlines that travel across Arnhem Land, into the Arafura Sea and across the Gulf of Carpentaria. This summary of our heritage deals only with our IPA area and does not represent the totality of our cultural realm.

“... 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.” Dhayirra Yunupingu¹²

Yolŋu Rom¹³



Underlying all cultural values of the IPA are the five dimensions of Yolŋu Rom (law) depicted in the diagram above. Our spirit ancestors created Yolŋu Rom as they sang, danced, talked, and left their tracks as they shaped our land and sea country. These Ancestral Beings changed their language as they arrived at each new territory, and named groups of land-affiliated Yolŋu, related to others along the same track. These ancestors belonged to clans of either the Dhuwa or the Yirritja moiety (see below).

Yolŋu can tell from each other’s language, art, song, and dance which land they belong to. Each has a history encoded in stories and songs in the language that belongs to that place. They link the land and people to totemic species - plants, animals, and physical phenomena. Our ancestors also passed down sacred designs, some of which are secret, or have secret meanings. These designs have been painted on people’s bodies, carved and painted on sacred objects, moulded into the earth, and more recently painted with ochres and acrylics on barks and canvases. The stories, songs, and art all specify both the differences and the connections among groups.

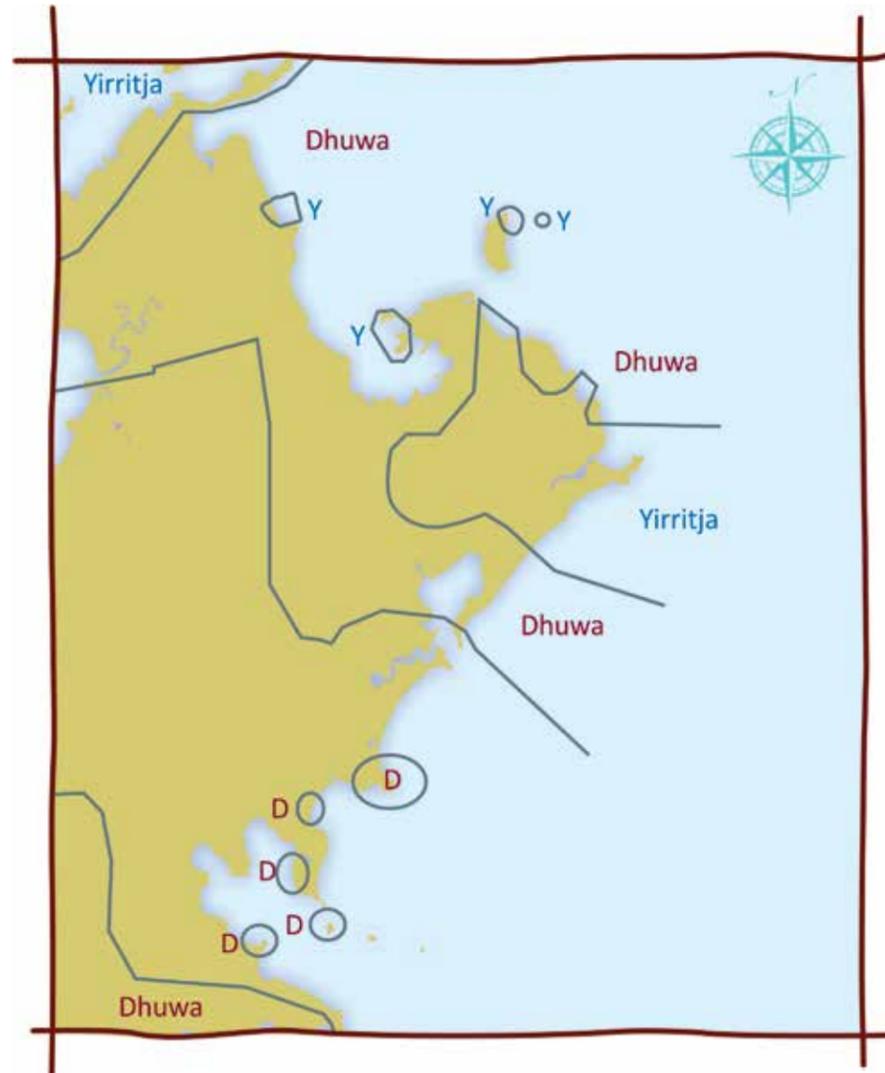
By managing our country as an IPA we are committed to respecting, maintaining, and strengthening Yolŋu Rom through all the work we do on country and especially by managing land and sea together.

12 Yunupingu (1992)
13 <http://www.yidakistory.com/dhawu/19rom.html>, 27 June 2015

Dhuwa and Yirritja moieties

When the Ancestral Spirit Beings created the country known to Yolŋu today,¹⁴ the cosmos, land and sea, natural features, people, animals and plants all became either Yirritja or Dhuwa moieties¹⁵ - complementary opposites that define relationships between individuals, clan estates, fauna, flora, land, and sea.

The map below shows the moiety affiliations of some clan estates within the Dhimurru IPA.



Moiety affiliations of some Yolŋu clan estates

Within each moiety, sub-sections provide another level of social organisation and the names of the subsections can be used as terms of address as well as for ceremonial purposes and forming relationships with strangers.¹⁶

14 Christie (2002)
 15 Moiety means a division into two halves (from the French word moitié, half)
 16 Keen (2004)

Yolŋu Matha (language)

Approximately forty related dialects are spoken in Northeast Arnhem Land by groups totalling some 6,000 people. 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.¹⁷

Clan estates

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. Senior Gumatj elder, Yäma Munungiritj, 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.”¹⁸

Each estate is managed as a single cultural geographical unit by the clan members who have inherited rights and responsibilities to that country. Yolŋu people from neighbouring clans or elsewhere may have customary rights to access and use the resources of estates of other clans through protocols and agreements that link our people and country across the entire Yolŋu domain of Northeast Arnhem Land.



17 <http://www.omniglot.com/writing/yolngu.php>, 27 June 2015
 18 Dhimurru Aboriginal Corporation (1999)

Categories of cultural places

For convenience, the cultural heritage places within the IPA are dealt with as three broad categories. They are:

1. **Sacred sites:**
Areas and places significant in Yolŋu tradition.
2. **Archaeological sites:**
Areas and places where there is physical evidence of past occupancy or use by Yolŋu ancestors or Macassans.
3. **Historical sites:**
Areas and places of historical significance as the result of encounters with missions and historical events.

Sacred sites refer to any place that is of significance according to Aboriginal tradition. Many of these places have cultural associations relating to important events in the distant past when the landscape and seascape were shaped through the journeys and activities of Ancestral Beings, while others may be associated with more recent camping sites, hunting and gathering places, ceremonial grounds and burial places.

Sacred sites are located on both land and water and constitute a large proportion of the IPA. Over twenty-five percent of the Dhimurru IPA coastline has been registered as sacred sites.

The site information is recorded in Dhimurru Information Management System (DIMS) and the use of information relating to sites is restricted depending of the cultural nature of the site. Mapping and registering sacred sites within the Dhimurru IPA is ongoing.

Relevant legislation and policy

Sacred sites are registered and protected under the *Northern Territory Aboriginal Sacred Sites Act 1989* and the *Aboriginal Land Rights Act 1976*.

The IUCN also provides guidelines which have six major principles to guide the appropriate management of sacred sites, these are:

Principle 1:

Recognise sacred sites already located in protected areas;

Principle 2:

Integrate sacred 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 sites;

Principle 5:

Protect sacred sites while providing appropriate management access and use;

Principle 6:

Respect the rights of sacred site custodians within an appropriate framework of national policy.

Dhimurru's organisational structure and collaborative arrangements ensure that the Dhimurru IPA is managed according to these IUCN principles, and are consistent with the United Nations Declaration on the Rights of Indigenous People (UNDRIP) which was formally supported by Australia in 2009.

Indigenous and Macassan archaeological sites

Archaeological sites in the Dhimurru IPA contain physical evidence of occupation and use of country by the ancestors of Yolŋu people in the ancient and recent past, as well as by Macassan visitors to Yolŋu country over the last several hundred years.

Indigenous archaeological sites

Indigenous archaeological sites within the Dhimurru IPA represent Yolŋu land use, occupation and connection to country for many thousands of years. These places allow Yolŋu to reflect on their ancestral past and investigate the changes that may have occurred in the IPA environment and resource use over time, including:

- 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.

The many coastal shell scatters and middens found in the Dhimurru IPA, dating back 6,000 years to when the sea stabilised at its current level, demonstrate the importance of coastal resource utilisation¹⁹ to Yolŋu people over a long period of time.

Indigenous archaeological sites 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 or other activity.

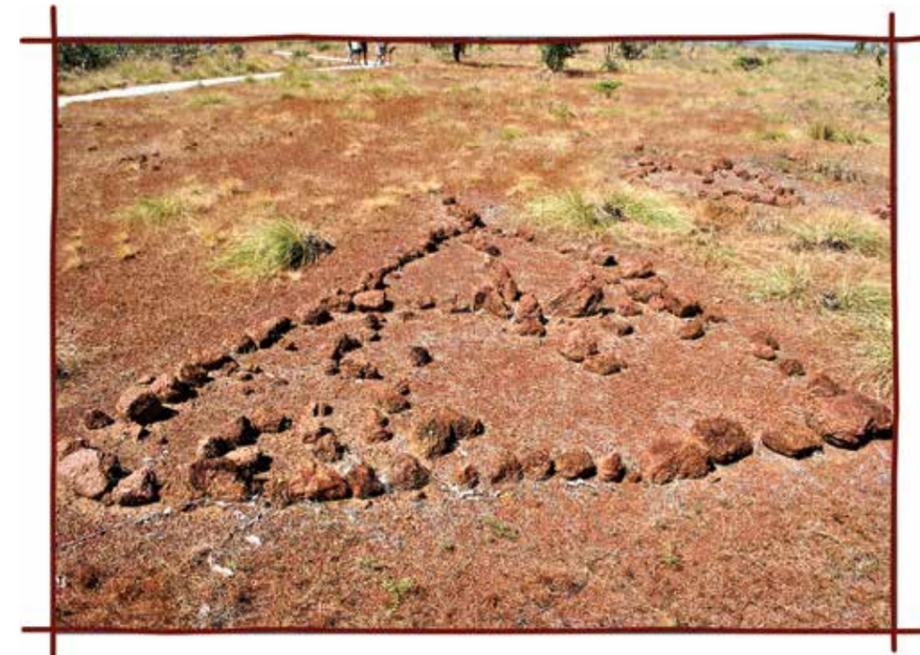
Stone quarries are sites where stone for flaked or edge-ground artefacts have been extracted from an outcropping source of stone.

Knapping locations, consisting 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.



Macassan archaeological sites

Since at least the early 18th Century, fleets of up to sixty vessels would journey from Macassar in Sulawesi (part of Indonesia) to the waters of Northern Australia each year. The Macassans from Sulawesi travelled in large sailing *praus* to the Arnhem Land coast and into the Gulf of Carpentaria each year to harvest trepang (*dharripa*), pearl (*mutiyarra*), and turtle shell (*jaraka*) in the shallow coastal waters. The Macassan fleets sailed south with the northwest winds of the wet seasons monsoons and sailed back north with the southeast trade winds about four months later.

¹⁹ Clarke (1994)

The sites where the Macassans 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 *Bayini*, which began the long tradition of interaction between the inhabitants of Arnhem Land with those of the Indonesian archipelago. Macassan visits continued until 1907, when the South Australian Government (which then governed the Northern Territory) raised taxes to fish the Northern waters so high that the collection of resources was no longer economically viable for the Macassans and the visits ceased.

Macassan material and non-material culture influenced Indigenous society during the lengthy period of cultural contact and exchange. This influence includes the introduction of dugout canoes, sails, metal for harpoons and other new technologies which facilitated dugong and turtle hunting which are now so important in Yolŋu culture.^{20 21}

Some Yolŋu people travelled with the trepang fishermen back to Macassar, and later returned to Yolŋu country and made stone arrangements (stone paintings) to depict what they had seen on their travels, such as Macassan houses, villages and ships. One such site, Wurrwurrwuy, in the Dhimurru IPA has been placed on the Heritage Register of the Northern Territory and the National Heritage Register in recognition of its cultural heritage significance.

Some Macassan words, such as *balanda* (white person) and *rupiah* (money) were introduced into the local language and continue to be used today.

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.

Macassan archaeological sites include:

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.

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, including shipwrecks.

Maritime sites associated with the region may include shipwrecks, anchorages, ship construction sites, careening/ship repair sites, abandoned canoes, canoe construction sites and artefacts directly associated with the vessels and technologies employed.

Relevant legislation

Indigenous, Macassan and other archaeological sites can be declared and protected under the *Heritage Act 2012 (NT)*, *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* which also established the NT Heritage Register.

Important historical events

There are many sites and places that are associated with events of local and national historic significance which have occurred over the last 100 years on land and sea country that now lie within the Dhimurru IPA. These events include the arrival of Japanese pearling fleets in the 1920s, the establishment of the Yirrkala Mission in the 1930s, a World War 2 airfield built in the 1940s, the discovery and mining of bauxite in the 1950s, the Gove land rights case in the 1960s and the creation of the Gove Bark Petition in the 1980s.

The Dhimurru IPA is also part of the Yolŋu homeland and holds significant memories and places of significance for many local families.

20 Clarke (2000)

21 McIntosh (1996)

Japanese pearling

During the 1920s, fleets of sometimes fifty Japanese pearling boats carrying crews of up to 800 men worked the northern Australian shores in search of trepang and oysters.²² As with the Macassan trepang fishers, this industry was open to Yolŋu involvement including trade and employment. However, working relations with the Japanese, unlike those with the Macassans were strained, with reports of repeated conflict between Yolŋu and the Japanese.

Mission time

When the Methodist Overseas Mission established Yirrkala Mission in 1935 on the coast some 15km east of Melville Bay²³ it was the first permanent non-Indigenous settlement established on Yolŋu country.

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.²⁴

During this time of mission presence at Yirrkala, resource rich areas such as *Manydjarrarrŋa-Nanydjaka* (Cape Arnhem) 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-Nanydjaka* (Cape Arnhem) area.²⁵



Yirrkala mission church

World War 2

During World War 2, a sealed aircraft runway was built to serve the allied servicemen stationed on the Gove Peninsula.

About 50 Yolŋu men trained and served with the Northern Territory Special Reconnaissance Unit led by anthropologist Donald Thomson²⁶ during the early 1940s monitoring the coast and preparing for a possible Japanese invasion. The threat of invasion prompted the evacuation of women and children from Yolŋu country^{27 28} and food rationing.²⁹

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.

22 Dewar (1992)

23 Dhimurru Aboriginal Corporation (1999)

24 Dewar (1992)

25 Dhimurru Aboriginal Corporation (1999)

26 Thomson (2003)

27 Dhimurru Aboriginal Corporation (1999)

28 Thornell (1986)

29 Thornell (1986)

Mining era

With the discovery in the 1950s 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.³⁰ 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.³¹ 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 (see image next page)³². Despite the sympathetic Joint Parliamentary Committee enquiry and report that the petition sparked, an agreement between the Commonwealth and Nabalco was struck in 1968.

In what became known as the Gove Land Rights Case (effectively Australia’s first native title claim), the agreement between the Commonwealth and Nabalco 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.³³ However, the Gove Land Rights Case led to the Land Rights Royal Commission, which in turn led to the passage in the Australian Parliament of the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth).

“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.”

Reverend Edgar Wells, Yirrkala Mission Superintendent.³⁴

Further discussion on mining in the Dhimurru IPA can be found in section 2.6.

Relevant legislation and policy

Historic sites obtain protection through the *Heritage Act 2012* (NT) and the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), including specific amendments relating to heritage matters.



30 Morphy (1991)
 31 Kauffman (1998)
 32 Dhimurru Aboriginal Corporation (1999)
 33 Williams (1986)
 34 Dhimurru Aboriginal Corporation (1999)



Cultural significance of Bäru (Saltwater Crocodile)

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 Bäru 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 have a direct conservation outcome for Yolŋu cultural heritage places. In general terms, wildlife management can be seen to have a direct conservation impact on the intangible cultural heritage values within the IPA.



Conservation Significance of the Dhimurru IPA

Dhimurru IPA's intact and interdependent environments are testament to the effectiveness of Yolŋu management and sustainable use over millennia. Furthermore, the region of northeast Arnhem Land in which the IPA is located is subject to few pressures and impacts from development compared to many other parts in Australia.³⁵

Situated on the Gove Peninsula and including coastal waters of the northwest Gulf of Carpentaria, Dhimurru contains a diversity of terrestrial, marine and island ecosystems supporting culturally significant species of high conservation value.

The IPA lies within the Arnhem Coast Bioregion which comprises a coastal strip extending from just east of Cobourg Peninsula to just north of the mouth of the Rose River in southeast Arnhem Land, and including many offshore islands, most notably the Groote Eylandt archipelago, the English Company Islands, the Wessel Group and the Crocodile Islands.

Climate

This region's tropical climate, influenced by its proximity to the coast, is characterised by hot, wet, humid summers and mild, drier winters. The northwest monsoons deliver much of the 800 mm to 1600 mm of the area's annual rainfall which comes from occasional tropical cyclonic activity, monsoon troughs, tropical depressions or scattered thunderstorms. The generally cloudy days of summer produce an average maximum temperature of around 33°C. During the dry winters minimum temperatures range between 15°C and 21°C in July and are coolest inland on cloudless nights.

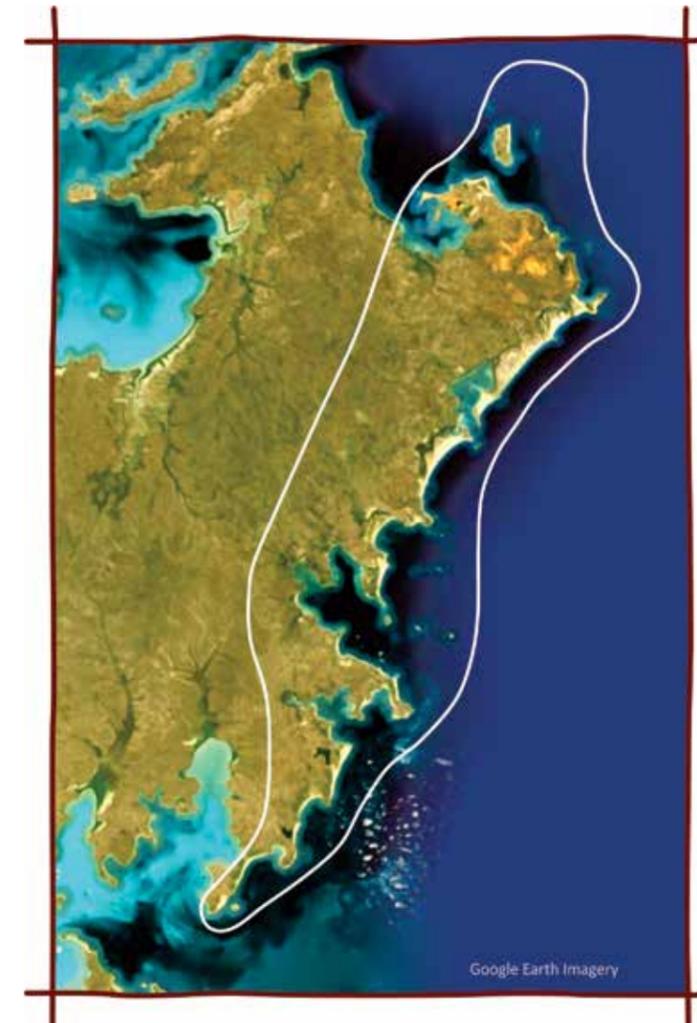
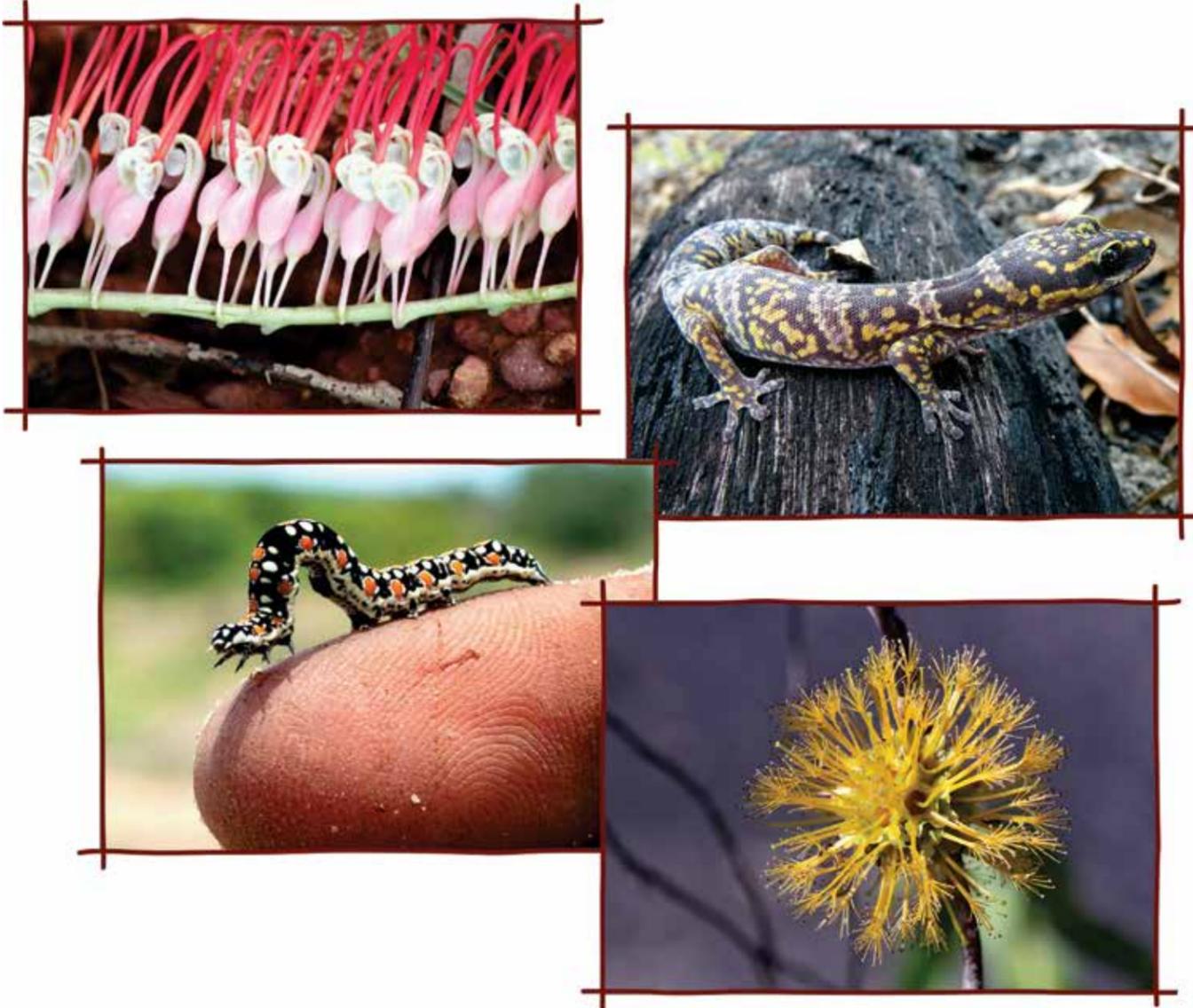


³⁵ Altman et al.(2007), Woinarski et al. (2007)

Terrestrial diversity ³⁶

The coastal ecosystems of the Dhimurru IPA include extensive coastal dune systems, rocky headlands, granite outcrops, pandanus forests and mangrove fringed tidal inlets.

Inland on the sand plains and plateaux, the vegetation ranges from sparse grasslands and occasional cycad forests to savannah woodland dominated by Darwin woollybutt (*Eucalyptus miniata*) and Darwin stringybark (*E. tetradonta*). Also numerous patches of monsoon forest occur behind coastal dunes and are associated with springs and creek lines.



Biodiversity surveys have recorded the presence of:

- 13 frog species;
- 76 reptiles;
- 207 birds (including 54 migratory bird species);
- 35 mammals;
- 18 threatened species.

There is insufficient data available about the conservation status of most species in the IPA, but mammal surveys elsewhere in the Arnhem Coast Bioregion indicate that most mammal populations are stable but a few are in decline. Botanical surveys indicate that some Northern Territory plant species are restricted to Dhimurru IPA.

The Dhimurru IPA lies within the Northern Territory’s Gove Peninsula and Northeast Arnhem Coast Site of International Conservation Significance, within which there are five 5 sites listed on the Register of National Estate for their natural values. ³⁷

³⁶ <http://www.lrm.nt.gov.au/plants-and-animals/conservation-for-land-managers/sites-of-conservation-significance>, 27 June 2015

³⁷ <http://www.lrm.nt.gov.au/plants-and-animals/conservation-for-land-managers/sites-of-conservation-significance>, 27 June 2015



Sea Country diversity

The seabed of the IPA forms part of the shallow Arafura Sill, which continues northward into the Wessel Commonwealth Marine Reserve and separates the deeper water of the Arafura Sea from the basin of the Gulf of Carpentaria. The Arafura Sill forms a distinct biogeographical transition area which supports a rich diversity of fish, sea snake and sponge species, and contains the most diverse coral reefs in the Northern Territory.

The Gulf of Carpentaria is believed to support at least 19 and possibly up to 26 of the 35 species of sea snakes, including elegant sea snake, ornate sea snake, olive-headed sea snake and Stokes' sea snake. Sea snakes have been recorded in large groups on the water surface of Blue Mud Bay, just to the south of the Dhimurru IPA.

An inshore benthic study in the Gulf of Carpentaria to the south of Dhimurru IPA found 452 species – suggesting the benthic marine environments of the IPA are also highly likely to be rich in biodiversity.

Marine Turtles

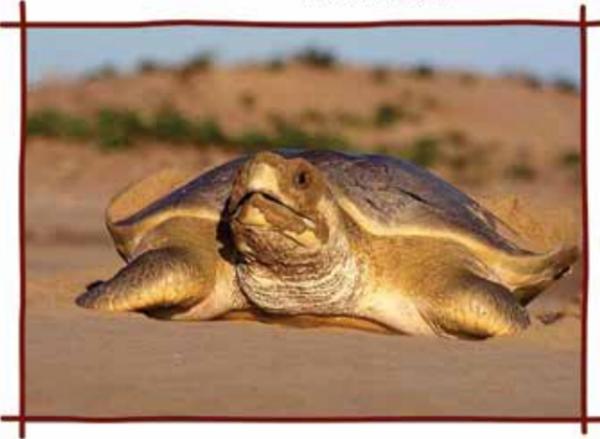
Six of the world's seven species of marine sea turtle can be found in the Dhimurru IPA. The area is an especially important nesting area for Green turtles, but Flatback, Hawksbill and Olive Ridley turtles have also been noted nesting on Dhimurru's sandy beaches. Occasionally Leatherback and Loggerhead turtles have been sighted in the waters of the Dhimurru IPA, but there are no records of these species nesting in the Dhimurru coastline.



Green turtle



Olive Ridley Turtle



Flatback Turtle



Hawksbill Turtle

Sea country in Dhimurru IPA also supports populations of dugong feeding on inshore seagrass meadows, and provides important foraging habitat for breeding aggregations of migratory sea birds such as the common noddy, roseate tern, the listed marine crested tern, black-naped tern, Caspian tern, brown booby and lesser frigate birds.

It is also likely that Dhimurru IPA supports other “flagship” species identified during the northern bioregional planning process, including Australian snubfin dolphin (one of the rarest mammals on earth), narrow sawfish and heart urchin (abundant on the seafloor and important for nutrient cycling).



Dugong



Snubfin Dolphin

Wessel Commonwealth Marine Reserve

The conservation significance of Dhimurru IPA sea country is further recognised by its overlap with the southern portion of the Wessel Commonwealth Marine Reserve, which has been dedicated as a marine protected area under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* for the following ecosystem values:

- Situated in a distinct biogeographical transition area for sessile invertebrates (e.g. sponges and corals) and fish species;
- Contains examples of the ecosystems of the Northern Shelf Province (including the Arafura, Arnhem-Wessel, and Carpentaria mesoscale bioregions);
- Includes one key ecological feature: Gulf of Carpentaria basin (biodiversity; aggregations of marine life).

Threats and challenges to heritage and conservation values

Dhimurru IPA is generally in good condition and free from major development pressures; the areas of Yolŋu country directly impacted by mining, urban development and port operations are excluded from the IPA boundaries.

However, some IPA heritage and conservation values are being damaged or threatened by continual increases in the number of feral animals, the spread of invasive introduced plants (weeds), broad-scale changes in fire regime and visitor impacts.

Regional threats to heritage and conservation values include:

- Insufficient information about locations and values of cultural heritage sites;
- Cultural change and loss of knowledge about cultural heritage;
- Impacts from visitors, resource use or commercial enterprises, including mining, fishing, shipping and logging;

- Impacts of environmental changes, such as invasive weeds, feral animals and climate change (including impacts on coastal cultural sites and wetland inundation from sea level rise).

We are also aware that there has been a decline in some small mammals across northern Australia and we are committed to working with other IPA managers, government agencies and other collaborating partners to better understand the causes of these declines and work together to reverse them.

In addition to these regional concerns there is a range of threats and challenges directly impacting on Dhimurru IPA. These include:

- Visitor pressure on sensitive coastal environments prone to erosion;
- Degradation from vehicle traffic;
- Localised impacts from bauxite mining;
- Infestation by the exotic Yellow Crazy Ant;
- Increases in water buffalo density;
- Impacts of other feral animals including feral cat, dog, horse, pig and cattle;
- Gradual spread of weeds from disturbed areas;
- Arrival of exotic pests, weeds and diseases from Australia's northern neighbours;
- Changed fire regimes;
- Marine debris from foreign fishing operations;
- Dieback is evident in some vegetation communities.

There are also likely to be additional threats and challenges from other sources, such as unsustainable resource use (from various sectors) which are currently unknown due to lack of comprehensive baseline biodiversity data and insufficient targeted monitoring of key species and habitats.



Achievements in heritage management and conservation

Since the declaration of Dhimurru IPA (Stage 1) in 2000, Dhimurru's Rangers and collaborating partners have achieved considerable success in responding to known threats to heritage and conservation values of the IPA. Some of these responses are summarised below.

Heritage management achievements

Because cultural values are so intimately connected to the biodiversity and ecosystems of the IPA, caring for its cultural heritage includes the management of the IPA's habitats, species and ecosystems. Many management actions directed at protecting the IPA's conservation significance are already contributing to the protection of cultural heritage.

Active measures to protect and manage cultural heritage sites in Dhimurru IPA include:

- Installation of interpretative signage at the Wurrwurrwuy and Nhulun site precincts;
- Site management at Wurrwurrwuy:
 - Maintenance of pathways;
 - Weed management;
 - Fire management;
 - Constructing a buffalo-proof fence;
 - Developing an access road and parking area;
- Cultural land and sea country mapping of Dhambaliya (Bremer Island) in 2012;
- Organising a Bāpi (snake) sand sculpture ceremony in 2013;
- Supporting the annual Garma Festival which showcases Yolŋu culture, aspirations and issues to Australia and the world;
- Development of the Dhimurru Information Management System (DIMS), which enables storage and retrieval of cultural site and other heritage information;
- The development of a CyberTracker sequence to ensure that appropriate consultations with Yolŋu have taken place before and after cultural mapping field work;
- Galtha workshops as a way to deliver both the Learning on Country program and support Dhimurru's cultural heritage;
- Cultural Seascape Mapping 2014.

Dhimurru's approach to heritage management

All sacred site and Indigenous, Macassan, and Maritime archaeological site management and conservation activities are guided by the principles of local consultation as stipulated in the Dhimurru Rule Book and this Management Plan. Sacred sites, in particular, 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/seascape management approach recognising the inseparable connection and interdependence of people, culture and environmental processes operating across the landscape/seascape. A collaborative approach to documentation, management, and conservation by Dhimurru, Yolŋu Traditional Owners and Custodians, statutory authorities, and research institutions is paramount.

Visitor management

Managing visitors on Yolŋu country has been a priority since Dhimurru's inception. The establishment of Designated Recreation Areas, an online access permit system, signage, information brochures, Facebook, a website, walking tracks, picnic and toilet facilities and regular Ranger patrols all contribute to reducing and managing the impact of visitors on natural heritage values of the Dhimurru IPA. Further information on visitor management is provided in section 2.6.



Yellow Crazy Ant control

The Yellow Crazy Ant (*Anoplolepis gracilipes*), which probably originated from Africa, gets its name from its fast and frenetic behaviour displayed when a nest or collection of individuals is disturbed. It is a medium sized (6 mm) ant, with very long legs and antennal scapes (first antennal segment attached to the head) that extend far past the top of the head. The body has a golden yellowish colour, and the abdomen is typically darker (brown to green). Yellow Crazy Ant does not bite or sting, and does not smell when crushed.

Yellow Crazy Ants are omnivorous scavenging predators which will actively attack anything encountered, particularly invertebrates, and kill by spraying formic acid onto the target. They also obtain carbohydrates from plant nectar or honey-dew producing insects, and can obtain nutrition from grain, seeds and decaying vegetation. They can form huge super-colonies that can cover tens or hundreds to thousands of hectares, reaching population densities of 1,000 per square metre or 70 million per hectare.

The high numbers of individuals, its voracious appetite for animal and plant foods, as well as its habit of nurturing honey-dew producing bugs that themselves become pests, make Yellow Crazy Ants a major ecological threat wherever they occur outside their native environments.

Following previous outbreaks and serious impacts on Christmas Island, in Queensland and in New South Wales, Yellow Crazy Ants were first discovered in Arnhem Land at Balkpalkbuy in 1990. A survey in 1999 discovered 12 infestation sites throughout northeast Arnhem Land.

Management of the Yellow Crazy Ant in northeast Arnhem Land over the last 10 years has been undertaken by a multi-agency collaboration led by Dhimurru Aboriginal Corporation with funding provided by Rio Tinto Alcan Gove and the Commonwealth Government, with scientific support from the CSIRO.



Using targeted surveys and baiting, the Yellow Crazy Ant has been successfully eradicated from 26 sites totalling 297 hectares within the IPA, with a further 1,000 hectares to be assessed. These outcomes make this the most successful Yellow Crazy Ant control operation in the world. While it appears impossible to totally eradicate this pest from this region, we are committed to its control and containing it to the Gove Peninsula so that it does not spread throughout the rest of Australia.

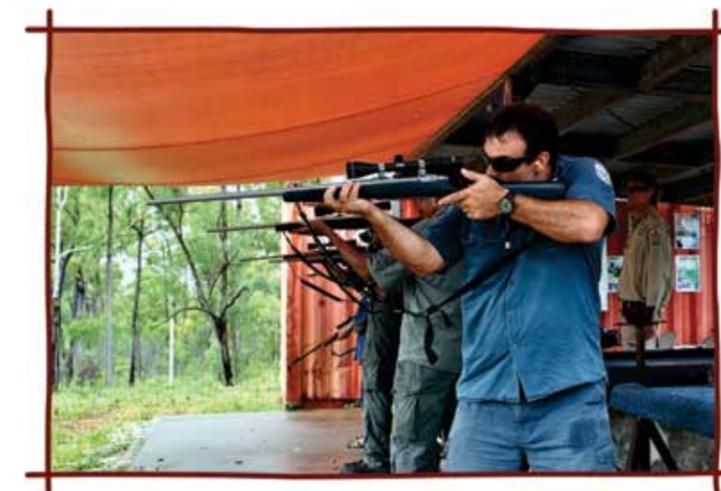
Feral animal control

Dhimurru's feral animal management activities are focussed largely on control of wild populations of water buffalo. Due to a lack of suitable environmental conditions such as large freshwater wetlands, the Dhimurru IPA does not support the density of water buffalo populations that are found in the adjacent Laynhapuy IPA. Nevertheless, they pose a significant threat to public safety around the township of Nhulunbuy and even small populations can produce severe environmental impacts.

Dhimurru's buffalo control activities occur predominantly in the vicinity of Nhulunbuy, often in conjunction with the local NT Police, in an effort to minimise public risk. Also, buffalo are culled opportunistically in the IPA if they are spotted when the Rangers are carrying out other land management activities.

Another threatening animal which is increasing its impact on Australian wildlife is the booming populations of cats. Feral cats are now regarded as one of the most serious threat to native wildlife across Australia. Zoologists and ecologists report massive decline in numbers of many species of small mammals, marsupials, reptiles and birds. In the late 1980s and 1990s scientists were reporting healthy populations of these native species, but are now finding a drop of up to 90% of previous population densities with feral cats being the main cause of this decline.

Generally the impact in Northern Australia and Arnhem Land has been severe, however the situation in the Dhimurru IPA is not clear. The management challenge in the next seven years will be to gain a better understanding of the number of feral cats in the IPA and how to go about managing the threat if there is a significant number present.

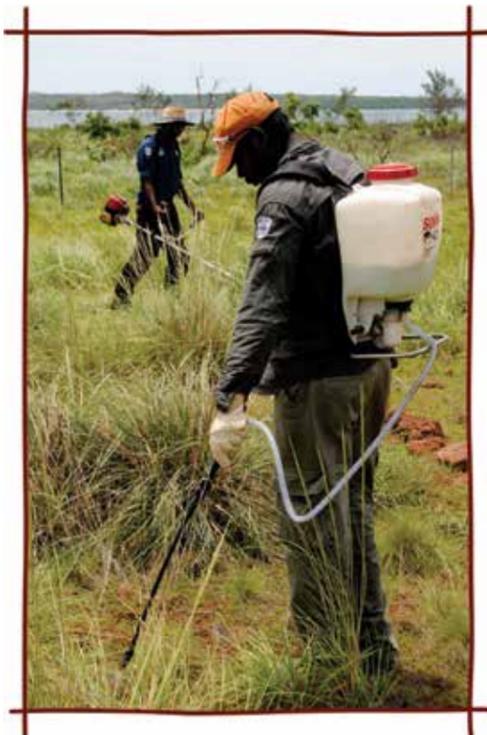


Weed management

Dhimurru IPA's plant and animal communities are vulnerable to the impact of introduced weed species, which have the potential to modify our natural ecosystems – making weed management a priority for Dhimurru Rangers.

Our strategic approach to controlling weeds includes:

- A long-term commitment to weed management;
- Identifying current weed distributions and determine control priorities;
- Integrating weed management into the wider spectrum of improved land management;
- Identifying areas prone to weed invasion;
- Early control and the minimisation of outbreaks;
- Minimising an area's susceptibility to invasion;
- Researching existing and potential weed problems; and
- Undertaking regular reviews.



The main weeds species in the IPA that Rangers control are perennial mission grass, hyptis, caltrop, coffee bush, Mossman river grass, salvinia and snakeweed.

Management activities throughout the year aim to reduce the spread of weeds and in time eradicate them from infested areas, and Rangers will continue to monitor areas of the IPA for new outbreaks. At the end of each year the control measures (spraying, hand pulling and burning) will be reviewed to ensure best practices are continued. Data collected during weed control operations will be recorded in the field using CyberTracker software on hand-held digital data recording devices and later entered into the Dhimurru Information Management System (DIMS) to facilitate ongoing monitoring of known weed sites.

Particular attention is paid to controlling weed outbreaks at recreation areas to minimise the risk of weeds being spread to other locations by vehicles. We are also committed to work with our neighbouring IPAs and others to take a regional approach to weed management whenever possible.

Detailed information about weed species, environmental impacts and control measures are provided in Appendix 5.

Fire management

Fire is a natural feature of Dhimurru IPA and is closely linked to the heritage of Yolŋu country.

A major fire management project began in 2012 to better understand the role of fire in Dhimurru's IPA and to improve biodiversity outcomes in our region. The project has established fire monitoring plots across the major land units of the IPA and a baseline flora and fauna survey has been done at these sites. The flora and fauna survey will be done again at the end of the project period and results analysed for change. The sites are photographed at least twice a year as a visual record and a fire history of the IPA is being developed over the six years of the fire project using satellite imagery and GIS.

A series of workshops with Yolŋu Traditional Owners and Custodians will take place during the life of this Management Plan to increase understanding about how and why Yolŋu burn country. Using this knowledge and the scientific knowledge obtained from the analysis of fire plot data and the fire history maps, we hope to produce a fire management plan for the Dhimurru IPA. It will establish the protocols for Dhimurru's involvement with the Yolŋu community in burning country and provide instruction on the 'right way' to burn country in the IPA to maintain and/or improve biodiversity in the region. Consultation with and involvement of clan leaders on fire management is ongoing.

Meanwhile, Dhimurru Rangers continue to conduct low intensity hazard reduction burns in the early dry season to protect IPA infrastructure and reduce fuel loads and to reduce the risk of more intense fires occurring later in the year.

Marine debris

Dhimurru Rangers, sometimes with the help of Conservation Volunteers Australia and other supporters, conduct regular beach clean-ups which remove tonnes of marine debris from the IPA each year. The Rangers have found that between 800 to 1,000kg of marine debris washes ashore per kilometre on much of Dhimurru's coastline each year. Many items of clear plastic debris have clear bite marks indicating that marine turtles and other animals are regularly mistaking plastics for jellyfish or other food.



The removal of marine debris from beaches reduces the overall impacts of this type of marine pollution, but unfortunately, the amount of marine debris being washed up on beaches in Dhimurru IPA is increasing each year.

Ghost nets are abandoned or derelict commercial fishing nets. These nets are regularly found washed ashore along the coastline of the Dhimurru IPA. Marine wildlife is often found entangled in ghost nets with marine sea turtles being the most affected. In 2014 the Dhimurru Rangers found 26 turtles entangled in nets on the IPA coast. By June 2015, Rangers found the same number of turtles entangled in nets indicating that 2015 may be just as severe, if not worse, than previous years.

Dhimurru is contracted by the Commonwealth Department of Agriculture to carry out a range of biosecurity monitoring activities including marine debris surveillance surveys. Rangers are looking for three types of waste: marine debris (flotsam and jetsam), commercial vessel waste and remnants of foreign fishing vessels along the coastline of the Dhimurru IPA.

Future heritage management and conservation

The tables on pages 70 and 71 summarise the objectives, actions, priorities and proposed timing to manage the heritage of Dhimurru IPA during the period 2015 to 2022. These objectives and actions have been developed in response to known or perceived threats to our heritage and to fulfil our commitment to protecting and managing places, habitats, species and ecosystems of cultural and conservation significance.

The objectives and actions below are based on the experience we have gained during the management of the IPA since 2000, the outcome of research and monitoring projects and following consultations with Yolŋu Traditional Owners and Custodians during the development of this Management Plan. In particular, Yolŋu identified the following heritage management priorities for the period 2015 to 2022:

- Continue revegetation programs and beach tree planting;
- Increase patrols on sea country and involvement in sea country management, following the inclusion of Yolŋu sea country as part of the IPA in 2013;
- Resolve continuing confusion over the legal jurisdictions that apply to open waters, estuaries, river mouths, inter-tidal zones, sacred sites, tidally exposed reefs and islands and the extent to which Dhimurru Rangers can control access;
- Explore management options for beaches close to Yirrkala, particularly *Ganarri-mi* (Shady Beach), *Dhumulumu* (Middle Beach) and *Garriri* (Rocky Bay).
- Maintain Dhimurru beach clean-up programs and extend to beaches between Yirrkala and Nhulunbuy;
- Maintain programs of weed control and feral animal control as ongoing priorities;
- Convene a series of forums/workshops over the coming years to provide Yolŋu leaders with the most up-to-date information on climate change scenarios for their land and sea;
- Build long-term partnerships with stable national and international organisations with expertise in climate change;
- Focus on getting Yolŋu in the best position possible to mitigate loss of their highest priority natural, cultural and intellectual assets;
- Clarify, both with Ranger staff and Traditional Owners and Custodians, the legal jurisdictions that apply to land and sea estates;
- Explore with senior Traditional Owners and Custodians ways to encourage responsible use of IPA lands and sea by Yolŋu, including observing traditional courtesies regarding access;
- With senior Traditional Owners and Custodians develop a Miyapunu (marine turtle) management plan to encourage culturally and environmentally sustainable harvest.

Climate change

Impacts of climate change and the development of adaptation strategies will be important considerations over the next seven years and beyond. Yolŋu are aware of potential climate change impacts and note the occurrence of rising sea levels and changes to seasonal cycles. The implications will extend to areas of health, education, infrastructure and economic development thus requiring collaboration with local and national agencies.



Objectives	Actions/Targets	Priority	Timing
Develop a systematic approach to cultural heritage management	Assess threats to cultural heritage places and develop a corresponding threat abatement strategy	High	2016
	Review data on sacred sites and clarify status with AAPA	High	2018
	Implement management actions resulting from the sacred site threat abatement strategy	High	2018
	Develop access protocols for Dhimurru staff, visitors and other agencies	High	2019
	Complete and maintain sites register which includes management actions	High	2019
Manage fire	Implement annual controlled burns in order to protect infrastructure Research the interaction of fire with the cultural and natural landscape values Develop a fire management plan for the IPA to protect and nurture identified values	High Medium Medium	Seasonally 2018 2019
Develop an information storage, sharing and retrieval system	Review the effectiveness of the current Dhimurru Information Management System (DIMS)	Medium	2016
	Clarify types of protection and ownership that relate to cultural information	Medium	2016
	Explore options to facilitate the efficient storage and retrieval of information, including that requiring varying levels of security	Medium	2018
Clarify and communicate legal framework	Seek advice about the legal framework across all aspects of the Dhimurru IPA	High	2017
	Develop materials to clearly communicate findings about the legal framework to constituents and stakeholders	High	2019
Maximise understanding of Yolngu knowledge	Complete the cultural landscape mapping of the whole of the IPA	High	2022

Rationalise IPA tracks	Finalise a track plan to facilitate safe serviceable access for; Recreation Management Cultural activities	High	2017
	Create a track maintenance schedule	High	2018
	Undertake annual track inspections noting status of signage, erosion and drainage, and identifying track drainage clearing requirements	Medium	Ongoing
Manage weeds and feral animals	Review Weed Management Plan prior to the weed season and implement in a timely fashion annually Opportunistically cull buffalo and pigs	High	annually
	Review feral animal impacts and update management strategy	Medium	ongoing annually

2.6 SUSTAINABLE LIVELIHOODS IN DHIMURRU IPA

The land and sea country of Dhimurru IPA has provided sustainable livelihoods for Yolŋu for thousands of years. Today, our country still provides us with food, art and craft supplies, medicines and ceremonial objects and our traditional land and sea resources remain an important part of our economy.

We also understand that the IPA supports the wider Australian economy through commercial and recreational fishing, tourism, mining, shipping and small scale logging. While these new economic uses of our land and sea resources have some impacts on the heritage values of the IPA, we recognise that these multiple livelihoods are an important part of the modern economy and we are committed to ensuring that they can be managed sustainably to protect the core values of the IPA. Through this Management Plan we invite commercial and recreational users of our land and sea country to collaborate with Dhimurru in the management of the IPA.

Yolŋu use of resources

The objectives and actions in the table below aim to ensure that traditional uses of IPA resources continue to support future generations of Yolŋu people in culturally and ecologically sustainable ways.

Objectives	Actions	Priority	Timing
Identify and understand use of Yolŋu resources	Identify, describe, and map Yolŋu resources with reference to the seasonal calendar	Medium	2022
	Document the importance and significance of key species and establish a priority matrix	Medium	2022
	Assess the status of Yolŋu resources, identify threats, and develop threat abatement strategies and prioritise as required	Medium	2022



Recreation Areas

Yolŋu welcome visitors to Dhimurru IPA, to enjoy the sense of isolation, relish the beautiful landscapes and seascapes and to learn about Yolŋu culture and connection to country.

We have established many recreation areas for use by residents of Nhulunbuy and tourists from elsewhere, and have developed a range of walking trails, picnic and toilet facilities and interpretative displays about the heritage values of the IPA.

It is expected that all visitors will acknowledge and respect that all of the land and sea in the Dhimurru IPA is culturally significant to Yolŋu people. To assist this process we have established a visitor management system to ensure visitors can experience and enjoy the IPA while minimising their impact on the heritage and other values of the area



Visitor permits

All visitors must purchase Dhimurru access permits from the Dhimurru office (see contact details on the inside cover of this Management Plan) or online at www.dhimurru.com.au. Access to recreation areas requires a general permit; there are some areas where special permits are required in addition to general permits.

Access permit arrangements are now well accepted by the local resident community and permit fees currently contribute approximately 10% of Dhimurru's operational budget. The access permit arrangements enable closure of areas for cultural reasons, for seasonal wildlife management reasons (such as the protection of turtle nesting sites), or if damage to an access track or site has occurred.

A copy of the access permit conditions is available on the Dhimurru website www.dhimurru.com.au. Dhimurru Rangers undertake regular patrols of the IPA to check that visitors have current access permits. For serious breaches of permit conditions, Dhimurru will revoke permits and will proceed to prosecution when circumstances are warranted.

Access permits are issued by Dhimurru under the terms of the *Aboriginal Land Rights (Northern Territory) Act 1980* (Cth).

Special permits are required to access the following areas of the Dhimurru IPA: Gaṇami (Wonga Creek), Gapuru (Memorial Park), Manangaymi (Scout Camp) and Wanuwuy (Cape Arnhem). These areas have specific management protocols and this information is provided with the purchase of special permits.

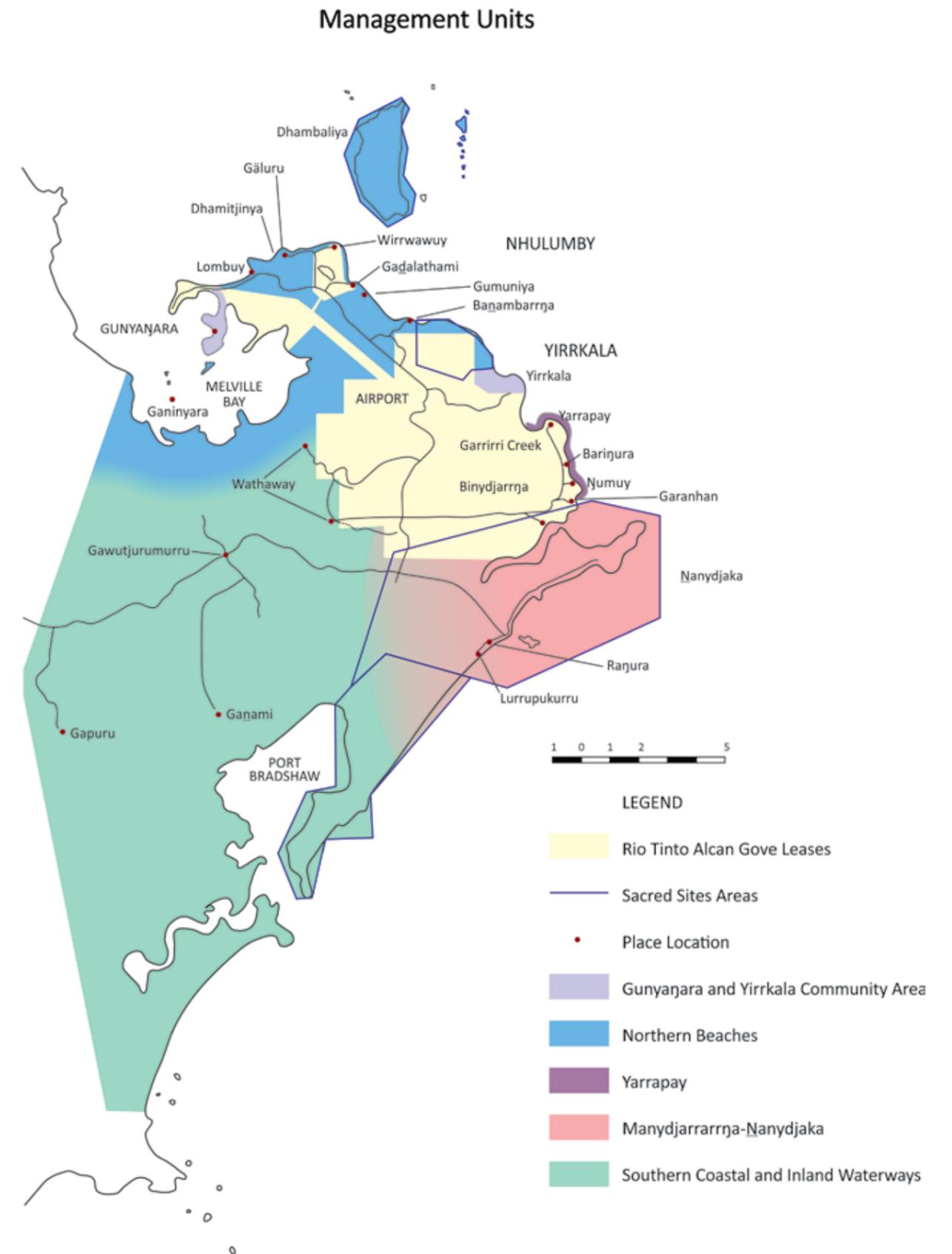
Visitor guidelines

The following guidelines apply to all Dhimurru permits:

- Stay on designated tracks – uncontrolled vehicular access to sites in the past has resulted in significant damage to landscapes, riparian zones, dune and littoral areas;
- No swimming – we do not recommend swimming in any recreation area because all waterways are known saltwater crocodile habitat;
- Motor bikes, quad bikes and four wheel drive vehicles are restricted to designated areas - serious damage in some parts of the Dhimurru IPA has been caused by irresponsible use of vehicles in the past.
- No shooting or bow hunting – these activities are not allowed anywhere in the Dhimurru IPA.

For the purposes of visitor management (and for other aspects of management), the Dhimurru IPA is divided into five management units. These management units are shown in the map on the following page, which also shows the mine lease area and the boundaries of the coastal (land and sea) registered sacred site areas.

Specific visitor management provisions for each of the management units can be found on Dhimurru’s website www.dhimurru.com.au



Recreation Area Objectives and Actions

Management Objectives	Actions/Targets	Priority	Timing
Maintain campsites	Install 4 x toilets at campsites	Medium	2022
	Replace 10 x bbq's	Medium	2016
	Maintain campsite infrastructure and grounds	High	Ongoing
	Site assessments conducted for each Designated Recreation Area	Medium	4 x year
Support Yolŋu on country	Undertake site assessments and scope of works	High	2018
	Install infrastructure	High	2022
Operate and maintain an access permit system	Issue permits and maintain database	High	Ongoing
	Maintain a high quality interpretive display at headquarters	High	Ongoing
	Review permit conditions and requirements	High	Annually
	Undertake a minimum of 70 patrol days per annum to assess compliance with permit conditions	High	Ongoing

Tourism

Yolŋu see both opportunities and threats from tourism and expect our relationship with the Northern Territory tourism industry to develop during the life of this Plan.

The number of tourists using land areas and sea country in the IPA is growing all the time, and there is an increasing number of touring yachts visiting our waters and coast. While we have developed successful processes for informing and managing land-based tourism, it is a greater challenge to communicate with and manage visitors to our sea country, which is a public access area with no requirement to seek a permit unless they wish to come ashore on our coastline.

Of concern to us is the lack of understanding and respect that tourism interests sometimes show for our culture and our country. Too often our culture and our country are seen as products to be packaged, marketed and sold.

It is largely our country and culture that makes northeast Arnhem Land such a desired tourist destination. Dhimurru's strong, active Ranger service is as essential to the regional tourism infrastructure as the roads, hotels, and signage.

Our people already have interests in sustainable eco and cultural tourism ventures and seek to develop more opportunities in these areas. Yolŋu tourism interests are managed through Yolŋu organisations and associations. Our role at Dhimurru is to:

- Make sure environmental and cultural impacts are adequately and thoroughly assessed;
- Where appropriate within the IPA provide interpretive information and promote Yolŋu knowledge and expertise;
- Arrange permits and licences by agreement with the Northern Land Council and Traditional Owners and Custodians;
- Supervise and monitor the permit system and occasionally contract Ranger and guide services to other organisations within our capacity to do so.



Tourism Objectives and Actions

Management Objectives	Actions/Targets	Priority	Timing
Communicate heritage values	Produce a new Dhimurru visitor's guide	Medium	2015
	Assist in the development of a visitor information bay for the region	Medium	2020
	Install and maintain recreation area signage at town entrance to inform public of seasonal or cultural closures	Medium	2015
	Produce articles for the Arafura Times and update other media such as websites and Facebook pages	Medium	Every two weeks
	Actively participate in Garma Festival and as a minimum provide a static display	High	Annually
	Facilitate interpretive displays at 3 community events per year	Medium	Annually

Bauxite mining, treatment and shipping

Rio Tinto Alcan Gove, operators of the bauxite mine and owners of the now curtailed alumina refinery on the Gove Peninsula, are an important Dhimurru IPA neighbour and collaborator. We acknowledge and appreciate the ongoing assistance that Rio Tinto Alcan Gove provides Dhimurru as part of their environmental and social commitments. In 2013 Dhimurru and Rio Tinto Alcan Gove signed off on a Memorandum of Understanding (MoU) seeking to provide a foundation for improved collaboration and cooperation in research, data sharing, and capacity building.

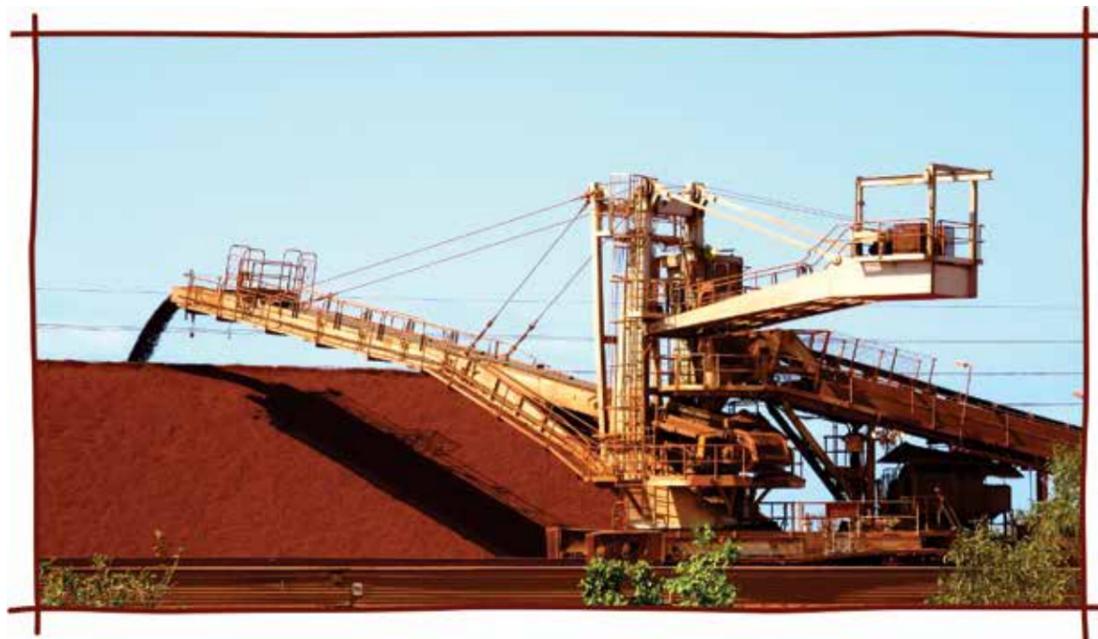
The MoU does not seek to secure financial and in kind assistance. Dhimurru and Rio Tinto Alcan Gove have agreed to review these arrangements particularly in light of the changed economic and demographic environment resulting from the refinery curtailment. Dhimurru and Rio Tinto Alcan Gove have agreed to finalise these negotiations by the end of 2015.

Dhimurru have also invited Rio Tinto Alcan Gove to consider having their mining leases incorporated into the Dhimurru IPA. This idea will need careful consultation and consideration by Traditional Owners. Dhimurru has put the idea forward as it considers actions that the organisation may need to take as Traditional Owners prepare for Rio Tinto Alcan's handback of mining leases to Traditional Owners. Handback will occur once economic bauxite reserves have been exhausted and rehabilitation objectives have been adequately met.

Dhimurru sees the inclusion of mining leases in the Dhimurru IPA as providing a possible framework for ensuring that Traditional Owners are well positioned with adequate capacity and resources to manage the lease areas when they are returned. Current predictions suggest that mining of Rio Tinto Alcan Gove’s leases will be drawing to an end in approximately 20 years.

Dhimurru continues to assist Traditional Owners in considering the potential impacts of Rio Tinto Alcan Gove’s operations and management actions. However Dhimurru does not see itself having a direct role to play in monitoring and regulating mining operations not seeking to do so preferring to see this role filled by relevant statutory authorities.

Objectives	Actions/Targets	Priority	Timing
Share information	Collaborate in research and environmental protection activities	High	Ongoing
Maximise collaboration and enhance management capacity	Structure a system of both ways reporting	Medium	2017
Manage the legacy of mining operations	Collaborate in the development of rehabilitation plans for the mine site and other areas of impact that Dhimurru may have management responsibility for post mining	High	Ongoing



Commercial and recreational Fishing

Commercial fishing

Commercial fishing has been a significant resource use since the arrival of Macassan trepang fishers at least 300 years ago. We recognise the right of licenced commercial fishers to continue to access our sea country and share our sea country resources. In the past, damage has been caused to our sacred sites through the actions of some commercial fishers – often through lack of awareness of the significance of these places or the cultural protocols regarding access.

There are currently three licenced barramundi fishers and one licenced Spanish mackerel fisher operating within the Dhimurru IPA. There are also several aquarium fish collectors operating in sea country around Nhulunbuy. Under current fisheries management arrangements in the Northern Territory there is the potential for more extensive commercial fishing activities within the IPA, as summarised in Appendix 6.

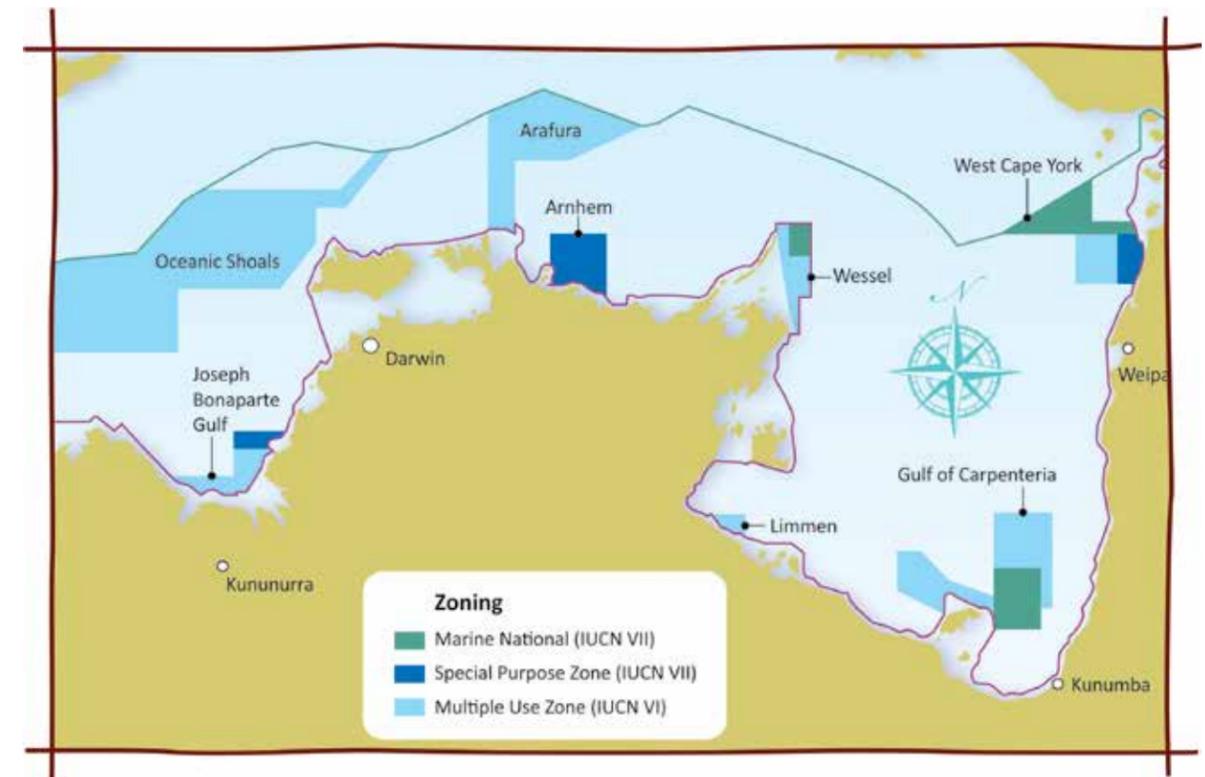
Through the implementation of this IPA Management Plan we aim to collaborate with the commercial fishing sector and to improve mutual understanding of our respective rights, interests and values. Through better awareness of these issues we seek to strengthen our relationships with the commercial fishing sector as a valuable IPA collaborator.



Northern Prawn Fishery

The Northern Prawn Fishery (NPF) extends in coastal and offshore waters across northern Australia (see map below), over a total area of 771,000 square kilometres off Australia’s northern coast.

The NPF is a significant component of the north Australian economy and is managed by the Commonwealth Government’s Australian Fisheries Management Authority (AFMA) under an agreement with the Queensland, Northern Territory, and Western Australian Governments.



Area of the Northern Prawn Fishery

Permanent and temporary closures are in place across the north to protect prawn nursery areas and other significant marine habitats and closures are communicated annually to trawler skippers in AFMA’s publication *Northern Prawn Fishery Operational Information*.

AFMA also provides the following information to skippers regarding access to Aboriginal land across the north:

Large areas of coastal lands and islands adjacent to the NPF area in the Kimberley region of Western Australia, the Northern Territory and northern Queensland are owned and managed by Aboriginal people. Like all other privately owned land in Australia, permission is required to enter Aboriginal owned land. It is the responsibility of NPF skippers and crew to ensure that permission has been granted to them before they go ashore on Aboriginal land. A genuine emergency at sea would be regarded as a legitimate exception to the rule. If you do have an emergency you must still notify the appropriate Aboriginal authorities as soon as possible after coming ashore. Advice on how to obtain permission to enter Aboriginal owned land can be obtained from the appropriate Aboriginal Land Council in each jurisdiction.

With respect to anchorages access to land in the Gove Peninsula, AFMA provides the following advice:

The Dhimurru Aboriginal Corporation has advised AFMA that NPF trawlers may anchor their vessels in Melville Bay in the area north of Lombuy Creek and will be able to come ashore on the eastern end of Wallaby Beach. Taxis can be ordered from this location.

Every individual going ashore will be required to carry a current Dhimurru permit to enter traditional Aboriginal land. Permits can be obtained from Dhimurru’s office in Nhulunbuy.

AFMA also provides the following advice with respect to Aboriginal sacred sites in Northern Territory waters:

In the Northern Territory, all places which are sacred or otherwise of significance according to Aboriginal tradition, are protected under the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth) and the *Northern Territory Sacred Sites Act 1989* (the Sacred Sites Act). This means that sacred sites are protected whether or not they have been ‘Declared’, ‘Registered’ or otherwise brought to official attention.

Further information on the target species, harvest areas and management arrangements for the Northern Prawn Trawl fishery is provided in Appendix 8.

Recreational fishing

Recreational fishing within Dhimurru IPA is an important aspect of the lifestyle enjoyed by many residents of Nhulunbuy as well as visiting tourists and sailors transiting our waters on yachts and other private vessels. This sector includes big game fishing on light line tackle using high powered deep sea vessels, as well as individual and family casual anglers using smaller vessels inshore. This sector is represented by the Territory-wide Amateur Fishermen’s Association of the Northern Territory (AFANT), as well as the Nhulunbuy Regional Sports Fishing Club locally (though not all recreational fishers are members of these organisations). We welcome recreational fishers to share the resources of the IPA and to collaborate with us to ensure that all values of the IPA are managed sustainably into the future.

Commercial and Recreational Fishing Objectives and Actions

The priority for managing the commercial and recreational sea country values of the Dhimurru IPA is to work with collaborating agencies and organisations to ensure the fisheries continue to be managed sustainably and that the commercial and recreational sectors do not impact adversely on the natural, cultural, and recreational values of the IPA. As active users of our sea country, the commercial and recreational sectors are valued for their capacity to contribute to the better understanding and management of all IPA values.

Objectives	Actions/Targets	Priority	Timing
Support sustainable fishing practices	Contribute to fisheries management planning opportunities to identify and address potential impacts on heritage values	High	Ongoing
	Share research data with fisheries managers to support best practice	High	Ongoing
Improve communication	Facilitate the Dhimurru Advisory Group meeting	High	6 monthly
	Assist Northern Territory Seafood Council in producing 6 x interpretive brochures regarding targeted species and fisheries practices	Medium	2022
	Assist Department of Land Resources and Fisheries produce a Recreational Fisheries Code of Conduct for the Dhimurru Sea Country	Medium	2016



2.7 LEARNING ON COUNTRY

Yolju clan leaders and the Board of Dhimurru understand that the future of Dhimurru IPA will depend on the capacity of future generations to maintain and practice the connection between Yolju culture and country, together with knowledge and expertise in contemporary land and sea management. To invest in these outcomes, Dhimurru has taken a lead role in the development and implementation of the Learning on Country (LoC) program that links indigenous Ranger groups and local schools to deliver on-country teaching focusing on culture and land and sea management, while reinforcing core objectives of the school curriculum.

Learning on Country was developed through a collaborative process involving local Elders, respected educators with long-standing commitment to teaching in Indigenous schools and Indigenous Ranger groups (including Dhimurru Rangers) in five remote Northern Territory Aboriginal communities – Maningrida, Galiwin'ku, Yirrkala, Groote Eylandt and Laynhapuy Homelands.

Secondary school students enrolled in the program cover maths, English and science through the practical and relevant land and sea management activities of the Rangers. Also a series of 'both ways' Galtha Rom workshops bring senior knowledge custodians in contact with younger people in a formal learning environment to build a foundation from Indigenous knowledge, skills and understandings.

This approach addresses the aspirations of parents and community leaders to affirm and celebrate culture and to ensure inter-generational transfer of cultural knowledge and practice, thus transmitting and protecting local Yolju cultural heritage for future generations.

The program also assists in keeping young people healthy and strong with an improved sense of their place in the world.

Students benefit from working with their local Rangers who understand their needs and challenges. Through the program students learn valuable skills to prepare them for a number of different employment options (not just Rangers), as well as making them eligible to obtain Certificate I or II in Conservation and Land Management.

Students participating to date have demonstrated commitment and active engagement, with some going on to complete work experience as Rangers and then permanent employment as Rangers.

The benefits for the Rangers are equally as compelling as those to the communities and students. The program provides Rangers with leadership and mentoring experience, public speaking in English and the local language, improved program management and organisation skills, and the opportunity for them to meet their obligations for knowledge transfer to the next and future generations.

The program also provides them with the opportunity to be leaders and role models, making a real difference within their communities and to the future of their own children.

The Learning on Country program involving Dhimurru and Yirrkala School began in 2013. The program aims to improve attendance of Yolju children at school, the readiness of students to take up satisfying and rewarding careers, and prepare the next generation of Yolju land owners to care for their intentionally significant estates.

Learning on Country is an exciting extension to our regular Ranger presentations to Yolju students at Yirrkala School. Students literally learn on country at events planned and delivered by senior Yolju students, Rangers, vocational education trainers and school teachers. Each event is followed up in regular classroom teaching that highlights aspects of country as resources for student development, learning and academic achievement.

Objectives	Actions/Targets	Priority	Timing
Support the Learning on Country (LoC) program	In conjunction with Yirrkala Rangers, facilitate at least two Galtha Rom workshop per year as a part of Learning on Country (LoC) program	High	Annually



The use of Yolju country and traditions helps to inspire and guide Yolju student learning to the same standard expected by all Australians is known as 'both-ways' education, an approach championed by the former Yirrkala School Principal and educational scholar, the late Dr M. Yunupingu.

In community consultations during the development of this Management Plan, Traditional Owners and Custodians expressed the hope that the Learning on Country program would reinforce traditional courtesies regarding rights and responsibilities around access and resource use, in particular in relation to harvesting marine turtles, which are sometimes ignored by younger people.

The Learning on Country initiative is supported by the Australian Government's Indigenous Ranger Cadetship Program, the Northern Territory Department of Education and more recently by the Indigenous Advancement Strategy.

2.8 RESEARCH IN THE DHIMURRU IPA

Over thousands of years Yolŋu people have studied and developed a deep understanding of country and adapted to major environmental changes over time. We have also adapted and adopted new technologies as they became available.

From inception, Dhimurru has steadily developed its capacity and participation in research to support land and sea management objectives. In collaboration with university and government agency researchers, we have undertaken many successful collaborative research projects through our ‘both-ways’ approach to combining Yolŋu and scientific approaches to problem-solving, environmental understanding and policy development. Research projects to date have focused on:

- Marine turtle and dugong conservation and management;
- Ghost net and other marine debris mitigation and removal;
- Yellow Crazy Ant control;
- Northern quoll relocation;
- Biodiversity surveys;
- Crocodile management;
- Management of the endemic Gove crow butterfly;
- Ethnozoology of frogs and toads;
- Fire management;
- Biosecurity;
- Fish abundance and health – focusing on Golden Snapper, Black Jewfish and Grass Emperor;
- Distribution of inshore dolphins and dugongs;
- Cultural mapping;
- Seagrass monitoring and mapping.

Over the next seven years we aim to extend wildlife and habitat surveys, mapping, and monitoring, further explore and develop ‘both ways’ approaches to manage and protect vulnerable species and habitats and encourage cooperative partnerships in research and management practice.

While our research collaboration efforts will mainly focus on supporting our identified management priorities, we will also consider approaches from researchers who wish to undertake projects involving Dhimurru IPA and its cultural and natural resources. In assessing research proposals we will require that the activities:

- Align with national policy directions and guidelines;
- Are consistent with Dhimurru’s Research Protocols;
- Comply with Australian guidelines for the conduct of ethical research involving indigenous people;³⁸
- Contribute to the understanding and/or protection of the cultural or natural heritage of Dhimurru IPA;
- Contribute to training and capacity-building of Dhimurru staff and Yolŋu people;
- In addition to research and monitoring components of management activities proposed elsewhere in this Management Plan, the priority research objectives and actions are set out in the table below.

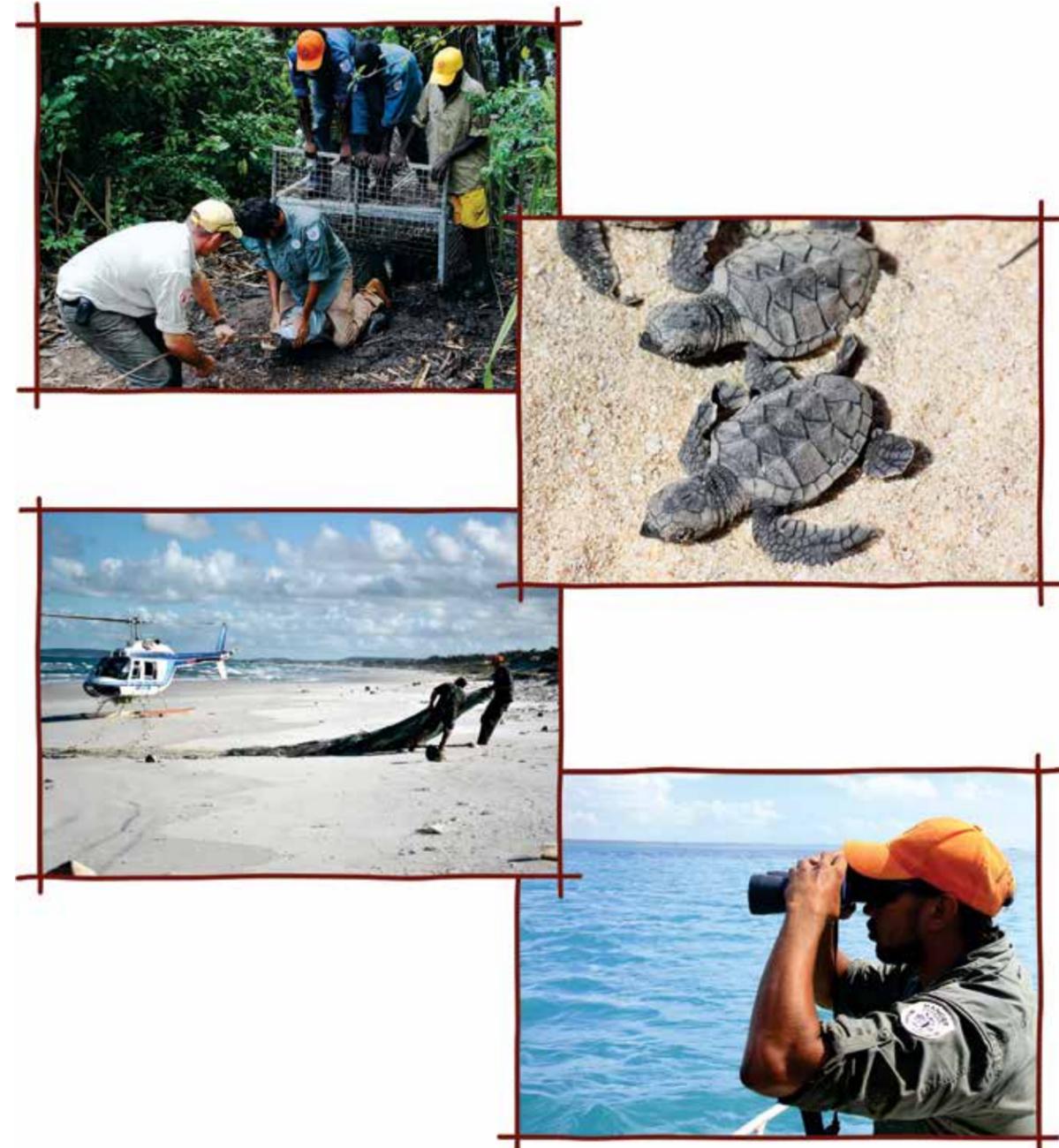
Two knowledge systems

Maintaining the balance between the Yolŋu and the mainstream worlds and the active practice of both-ways natural and cultural resource management is an important key guiding principle.

As one Rirratjingu elder says:

“We need to ensure there is balance between Yolŋu and Ŋapaki land and sea management and that Ŋapaki work does not over run Yolŋu ideas.”

38 AIATSIS (2012)



Objectives	Actions/Targets	Priority	Timing
Increase our understanding of biodiversity and ecology of the IPA	Establish a database on natural values Map habitat and biodiversity information regarding sea country assets	High High	2018 2020
Monitor IPA Values	Promote the formation of a regional marine research hub in Nhulunbuy Conduct 3 flora fauna surveys in representative habitats	Medium Medium	2018 2022
Understand the likely impact of climate change	Identify, describe, and assess potential climate change impacts Identify and prioritise management actions to minimise the impacts of climate change, protect key resources, and improve resilience at both a community and a resource management level	Medium Medium	2020 Ongoing
Manage the impacts of climate change	Implement actions to minimise the effects of climate change Assist in actions to increase resilience at community and resource levels Take climate change impacts into account in developing monitoring, research and management initiatives with respect to heritage values	Medium Medium Medium	Ongoing Ongoing Ongoing

2.9 MONITORING, EVALUATION, REPORTING AND IMPROVEMENT (MERI) STRATEGY FOR DHIMURRU ABORIGINAL CORPORATION 2015-22

Introduction

In order to understand the work we do on country, Dhimurru and its collaborating organisations need a clear, straightforward and consistent method of reporting and evaluation.

Dhimurru is committed to continuously improving its organisational capacity and performance through regular reviews of its strategic planning. This MERI is one segment of the management matrix which provides overall direction across the organisation and is integrated within the Dhimurru Indigenous Protected Area (IPA) Management Plan 2015-22.

Scope

In line with the Caring for our Country MERI Strategy, Dhimurru will implement monitoring and evaluation in representative areas rather than every aspect of the project. The key areas to be monitored were selected using the Dhimurru Vision Statement as a guide and include:

- a) Look after land and sea country for those who follow, to protect and maintain it;
- b) Yolŋu continue to use and nurture country for all generations to come;
- c) Manage, preserve, maintain and protect Designated Recreation Areas;
- d) Only Yolŋu, the people whose lives are governed by Yolŋu law and belief, make decisions for the land;
- e) Working together to achieve goals.

Users

Users of the MERI strategy will primarily be the Dhimurru IPA managers and its Advisory Group. It will inform on-ground management of IPA values and guide future revision of the Dhimurru IPA Management Plan. Other users of the MERI strategy will include the Commonwealth Department of the Prime Minister and Cabinet and Department of the Environment to assist in substantiating management effectiveness with respect to the National Reserve System.

Monitoring

Monitoring targets set out below provide both qualitative and quantitative measures of heritage values and resource management. They are designed to provide results necessary for evaluation of progress towards key objectives of the Dhimurru IPA Management Plan 2015-22, and those of the overarching National Caring for Our Country strategy.

All of the monitoring described here is to be undertaken by the Dhimurru Rangers, as part of their role in implementing the agreed Dhimurru IPA Management Plan 2015-22.

The results will however be assessed by Dhimurru senior management and the Dhimurru Board. It is also intended they be incorporated into reporting requirements for the Commonwealth Government and IPA funding agreements.

Review and Improvement

Dhimurru reviews its annual work plans in February of each year. Key outcomes of this review process include scrutiny of the previous year's activities and outcomes, areas for improvement, reporting and analysis. During this time the Dhimurru IPA Management Plan and the Operational Plan are evaluated and adjustments made to the timings and priorities matrix as required.

This exercise also considers the data, management strategies, processes and progress towards the projects' defined aspirational and long-term outcomes. Strong emphasis is placed on an adaptive management approach for continuous improvement of the overall IPA project.

Along with this internal review of the organisation's work plans, Dhimurru convenes two Advisory Group Meetings annually at which time the results of monitoring and evaluation are presented for analysis and feedback. Membership of the Advisory Group is outlined in section 2.3 Governance and Collaborating Partnerships of the Dhimurru IPA Management Plan 2015-22.

TABLE 1: SELECTED MONITORING ACTIONS FOR 2015-2022

Monitoring Action 1

Look after land and sea country for those who follow, to protect and maintain it

What do we need to know?	How will we know it?	What does success look like?
How do we best manage fire?	Yolŋu knowledge is guiding management decisions regarding right way burning	3 workshops with Traditional Owners
	Country, plants and animals, remain healthy	1 biodiversity survey
	Report on biodiversity survey	27 photoplots photographed twice a year until 2017
What are the threats to country and how do we manage them?	Dhimurru will understand what threats to key IPA values are present	Identify the key heritage values of the IPA Develop a threat/risk matrix for these values
	Dhimurru will know how to manage threats	Develop response strategies and establish management activities to conserve threatened values
How do we manage erosion and improve tracks?	Safe and serviceable tracks network will be established	Finalise track plan and undertake works in accordance with plan
	Impact of erosion will be minimised	Reduced incidence of erosive events during high rainfall periods
	Eroded areas will be remediated	Areas already impacted by erosion will be rehabilitated
How should we deal with the impacts of climate change?	Dhimurru will understand the potential impacts of climate change	Consult with research agencies and other experts to formulate a climate change risk assessment
	Community will become as resilient as possible to the potential impacts of climate change	Feedback to community results of risk assessment and consultations with external agencies
How do we best manage feral animals and weeds?	Populations of feral buffalo and pigs will not increase	Buffalo and pigs eradicated on an ad-hoc basis during patrols. Sightings of animals recorded during patrols
	Density and distribution of weeds will be reduced.	Treat weeds in accordance with the weeds management plan

Monitoring Action 1 (cont'd)		
	New feral animals or plant incursions swiftly reported and treated	Rangers and community members reporting any sightings of unusual plants or animals to Dhimurru Management actions swiftly implemented to reduce or eradicate threats associated with incursion

Monitoring Action 2

Yolŋu continue to use country for all generations to come

What do we need to know?	How will we know it?	What does success look like?
How do we best utilise Yolŋu knowledge, skills and understandings?	Traditional knowledge guiding management objectives	Map entire IPA cultural land and seascape.
How do Yolŋu use resources? How do we best preserve these resources?	Identify, describe and map Yolŋu resources	Key Yolŋu resources identified, documented and protected
	Document the importance and significance of key species and establish a priority matrix	
	Assess the status of these resources, identify threats and develop threat abatement strategies	
How to sustainably harvest resources for traditional use?	Develop a sustainable resource harvest strategy	Amount of resources on country remain unchanged over time
What are our biodiversity and ecological assets? How do we best preserve these assets?	Establish a database of natural values. Establish a threat matrix and threat abatement strategy.	Natural values remain unchanged over time
	Map habitat and biodiversity information regarding sea country assets	Natural sea country assets remain unchanged over time

Monitoring Action 3

Manage, preserve, maintain and protect Designated Recreation Areas

What do we need to know?	How will we know it?	What does success look like?
What do we need to do to maintain campsites?	Through the installation of infrastructure, Designated Recreation Areas are protected from misuse	4 x toilets installed at Designated Recreation Areas
		10 x BBQs replaced at Designated Recreation Areas
Is our permit system working?	Public continue to purchase permits and comply with permit conditions	Issue permits and maintain database
	Through regular patrols, compliance increased and misuse of Designated Recreation Areas reduced.	70 x patrol days per annum

Monitoring Action 3 (cont'd)		
How to get the Yolŋu story across to non-indigenous visitors?	Greater public respect for Yolŋu values	New Dhimurru Visitors Guide Development of visitor information bay
	Greater public respect for country	Development of recreation area signage
	Increased incident reporting to Dhimurru by public	Active participation at Garma and other festivals Facilitate interpretive displays at three community events per year
	Decrease in damage to Designated Recreation Areas	Regular interpretive articles in local media

Monitoring Action 4

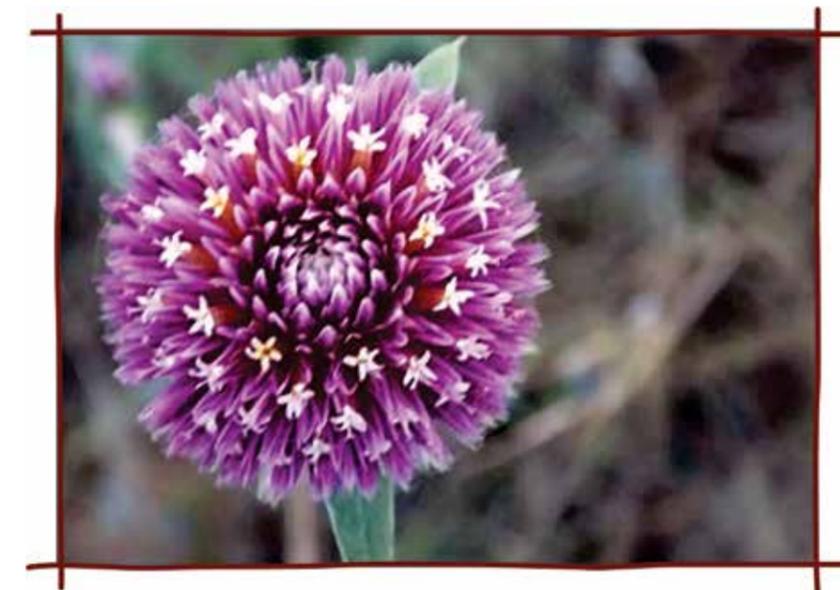
Only Yolŋu, the people whose lives are governed by Yolŋu law and belief, make decisions for the land.

What do we need to know?	How will we know it?	What does success look like?
How to manage people on our country?	Visitors respecting country and complying with the laws designed to protect it	Three Rangers trained in Cert II Fisheries compliance
		Two Rangers trained in Cert III Fisheries compliance
		Dhimurru hosts one Fisheries Police visit at least once a year
What is the legal framework Dhimurru works within?	Yolŋu understand their legal position	Dhimurru will seek advice about the legal framework across all aspects of the IPA
		Communication materials developed to communicate these findings to Yolŋu
How do we best support Traditional Law?	Traditional law and practice being learnt by students.	In conjunction with Learning on Country and Yirralka Rangers, facilitate at least two Galtha Rom workshops a year

Monitoring Action 5

Working together to achieve goals

What do we need to know?	How will we know it?	What does success look like?
What is the governance framework Dhimurru works within?	Working effectively with collaborating organisations	Facilitate two Advisory Group meeting per year and continue to communicate with the group throughout the year
	Effective communication between Dhimurru, the Dhimurru Board, and Wäŋa Waŋu	Board meeting every two months
How do we best utilise outside expertise to assist us in achieving our goals?	Effective collaboration and communication between Dhimurru and outside organisations such as research organisations	Establish a research strategy
How do we best work with our neighbouring Indigenous Protected Areas?	Regular, open and constructive communication with our neighbours	Facilitate attendance at Advisory Group meetings
		Joint workshops including Galtha Rom and Learning on Country events
		Assist in the organisation of a regional Ranger workshop



PART 3 DHIMURRU IPA OPERATIONAL PLAN

This part of the IPA Management Plan includes a summary of all the IPA management objectives and actions that have been outlined in each separate section of Part 2 of the Plan, focusing on:

- Employment, training and staff development
- Managing heritage values of the Dhimurru IPA
- Sustainable Livelihoods
- Learning on Country
- Research

3.1 EMPLOYMENT, TRAINING AND STAFF DEVELOPMENT

Objectives	Actions/Targets	Priority	Timing
Cultural learning	All staff attend ceremonies where appropriate Facilitate staff participation in 'both ways' workshops Include cultural content when planning in-house training Develop a training outline and delivery strategy on the cultural landscape at recreational areas Sponsor Yolju Matha Introductory study through CDU or similar	High High Medium High Medium	Ongoing One per year 2015 then ongoing 2016 then ongoing Ongoing
Training and career development	Seven Rangers achieve Certificate II in Conservation Land Management Three Rangers achieve Certificate III in Conservation and Land Management	High High	2022 2022
Facilitate staff exchanges	Facilitate exchange opportunity to a location outside of Dhimurru Host a visitor exchange at Dhimurru	Medium Medium	Once every two years One per year
Improve work output and efficiency	Develop and monitor project work plans as part of annual forward planning process Develop standard operating procedures for use of all equipment	High High	Once a year 2018

Improve compliance delivery	Three Rangers trained to Certificate II Fisheries enforcement Two Rangers trained to Certificate III Fisheries enforcement Host Fisheries Police visit to Dhimurru IPA Develop implementation protocols with relevant agencies	High Medium Medium High	2018 2020 Minimum one per year 2018
Maximise Yolju employment	Maximise the number of identified positions based on realistic assessment of candidates availability Encourage participation of staff in 'work readiness' programs such as RALPA and LoC and recognise achievements in recruitment	High High	Ongoing Ongoing
Expand Ranger services	Explore options for models which will most effectively deliver Ranger services to homeland communities Develop a plan in conjunction with homelands to expand Ranger services to the communities	Medium Medium	2017 2019
Locating Rangers in Homelands	Explore models which could enable Dhimurru to locate a Ranger or Rangers in homelands.	Medium	2018

3.2 MANAGING HERITAGE VALUES OF DHIMURRU IPA

Objectives	Actions/Targets	Priority	Timing
Develop a systematic approach to cultural heritage management	Assess threats to cultural heritage places and develop a corresponding threat abatement strategy	High	2016
	Review data on sacred sites and clarify status with AAPA	High	2018
	Implement management actions resulting from the sacred site threat abatement strategy	High	2018
	Develop access protocols for Dhimurru staff, visitors and other agencies	High	2019
	Complete and maintain sites register which includes management actions	High	2019
Manage fire	Implement annual controlled burns in order to protect infrastructure Research the interaction of fire with the cultural and natural landscape values Develop a fire management plan for the IPA to protect and nurture identified values	High Medium Medium	Seasonally 2018 2019
Develop an information storage, sharing and retrieval system	Review the effectiveness of the current Dhimurru Information Management System (DIMS)	Medium	2016
	Clarify types of protection and ownership that relate to cultural information	Medium	2016
	Explore options to facilitate the efficient storage and retrieval of information, including that requiring varying levels of security	Medium	2018
Clarify and communicate legal framework	Seek advice about the legal framework across all aspects of the Dhimurru IPA	High	2017
	Develop materials to clearly communicate findings about the legal framework to constituents and stakeholders	High	2019
Maximise understanding of Yolju knowledge	Complete the cultural landscape mapping of the whole of the IPA	High	2022

Rationalise IPA tracks	Finalise a track plan to facilitate safe serviceable access for; Recreation Management Cultural activities	High	2017
	Create a track maintenance schedule	High	2018
	Undertake annual track inspections noting status of signage, erosion and drainage, and identifying track drainage clearing requirements	Medium	Ongoing
Manage weeds and feral animals	Review Weed Management Plan prior to the weed season and implement in a timely fashion annually Opportunistically cull buffalo and pigs	High	annually
	Review feral animal impacts and update management strategy	Medium	ongoing annually

3.3 SUSTAINABLE LIVELIHOODS IN DHIMURRU IPA

(a) Traditional Use of Yolŋu Resources on Land and Sea

Objectives	Actions	Priority	Timing
Identify and understand use of Yolŋu resources	Identify, describe, and map Yolŋu resources with reference to the seasonal calendar	Medium	2022
	Document the importance and significance of key species and establish a priority matrix	Medium	2022
	Assess the status of Yolŋu resources, identify threats, and develop threat abatement strategies and prioritise as required	Medium	2022

(b) Recreation Area Management

Management Objectives	Actions/Targets	Priority	Timing
Maintain campsites	Install 4 x toilets at campsites	Medium	2022
	Replace 10 x bbq's	Medium	2016
	Maintain campsite infrastructure and grounds	High	Ongoing
	Site assessments conducted for each Designated Recreation Area	Medium	4 x year
Support Yolŋu on country	Undertake site assessments and scope of works	High	2018
	Install infrastructure	High	2022
Operate and maintain an access permit system	Issue permits and maintain database	High	Ongoing
	Maintain a high quality interpretive display at headquarters	High	Ongoing
	Review permit conditions and requirements	High	Annually
	Undertake a minimum of 70 patrol days per annum to assess compliance with permit conditions	High	Ongoing

(c) Tourism

Management Objectives	Actions/Targets	Priority	Timing
Communicate heritage values	Produce a new Dhimurru visitor's guide	Medium	2015
	Assist in the development of a visitor information bay for the region	Medium	2020
	Install and maintain recreation area signage at town entrance to inform public of seasonal or cultural closures	Medium	2015
	Produce articles for the Arafura Times and update other media such as websites and Facebook pages	Medium	Every two weeks
	Actively participate in Garma Festival and as a minimum provide a static display	High	Annually
	Facilitate interpretive displays at 3 community events per year	Medium	Annually

(d) Bauxite mining, treatment and shipping

Objectives	Actions/Targets	Priority	Timing
Share information	Collaborate in research and environmental protection activities	High	Ongoing
Maximise collaboration and enhance management capacity	Structure a system of both ways reporting	Medium	2017
Manage the legacy of mining operations	Collaborate in the development of rehabilitation plans for the mine site and other areas of impact that Dhimurru may have management responsibility for post mining	High	Ongoing

(e) Commercial and recreational fishing

Objectives	Actions/Targets	Priority	Timing
Support sustainable fishing practices	Contribute to fisheries management planning opportunities to identify and address potential impacts on heritage values	High	Ongoing
	Share research data with fisheries managers to support best practice	High	Ongoing
Improve communication	Facilitate the Dhimurru Advisory Group meeting	High	6 monthly
	Assist Northern Territory Seafood Council in producing 6 x interpretive brochures regarding targeted species and fisheries practices	Medium	2022
	Assist Department of Land Resources and Fisheries produce a Recreational Fisheries Code of Conduct for the Dhimurru Sea Country	Medium	2016

3.4 LEARNING ON COUNTRY

Objectives	Actions/Targets	Priority	Timing
Support the Learning on Country (LoC) program	In conjunction with Yirralka Rangers, facilitate at least two Galtha Rom workshop per year as a part of Learning on Country (LoC) program	High	Annually

3.5 RESEARCH

Objectives	Actions/Targets	Priority	Timing
Increase our understanding of biodiversity and ecology of the IPA	Establish a database on natural values	High	2018
	Map habitat and biodiversity information regarding sea country assets	High	2020
Monitor IPA Values	Promote the formation of a regional marine research hub in Nhulunbuy	Medium	2018
	Conduct 3 flora fauna surveys in representative habitats	Medium	2022
Understand the likely impact of climate change	Identify, describe, and assess potential climate change impacts	Medium	2020
	Identify and prioritise management actions to minimise the impacts of climate change, protect key resources, and improve resilience at both a community and a resource management level	Medium	Ongoing
Manage the impacts of climate change	Implement actions to minimise the effects of climate change	Medium	Ongoing
	Assist in actions to increase resilience at community and resource levels	Medium	Ongoing
	Take climate change impacts into account in developing monitoring, research and management initiatives with respect to heritage values	Medium	Ongoing

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APPENDIX 1

Applying the IUCN protected area definition to the Dhimurru IPA

The table below is a modified version of the table provided on pages 12 to 14 of the Guidelines for Applying the IUCN Protected Area Management Categories to Marine Protected Areas (available at http://cmsdata.iucn.org/downloads/iucn_categoriesmpa_eng.pdf). The table explains how each component of the IUCN protected area definition is applied to the Dhimurru IPA.

Phrase	How this phrase applies to the Dhimurru IPA
Clearly defined	<ul style="list-style-type: none"> Dhimurru IPA has clearly delineated boundaries on land and sea, as shown on the accompanying map. The landward boundary incorporates, wherever possible, the entire catchment of streams running across the terrestrial component of the IPA into the Gulf of Carpentaria. The marine boundary extends approximately 40kms offshore, incorporating an area of Traditional Owners and Custodians' marine estates which can be effectively managed by Dhimurru Rangers, in collaboration with the IPA collaborators – though these marine estates may extend beyond the IPA boundary.
Geographical space	<ul style="list-style-type: none"> The Traditional Owners and Custodians of the expanded Dhimurru IPA seek to protect all the significant natural and cultural values on the land, subsurface, air above, water column and seabed within the boundaries shown on the map on page 2 above.
Recognised	<ul style="list-style-type: none"> Following the negotiation of management goals and collaborative management arrangements with Dhimurru's collaborating agencies and organisations, the Australian and Northern Territory governments have formally recognised the expanded IPA as part of Australia's National Reserve System and on the World Database on Protected Areas.
Dedicated	<ul style="list-style-type: none"> The IPA has been dedicated under customary law by the Aboriginal Traditional Owners and Custodians who have the cultural responsibility and authority for the land and sea clan estates located within the IPA. The dedication process involved a public ceremony led by Traditional Owners and Custodians, followed by a separate ceremony at which representatives of government agencies and other IPA collaborators formally recognised the IPA. The IPA Management Plan includes a statement to the effect that the IPA dedication (or declaration) is a non-legal process that does not impact on any current authorities, licences, access rights or use rights. Any changes to current arrangements would occur only through negotiation and agreement.
Managed	<p>Management of the terrestrial and marine components of the IPA includes:</p> <ul style="list-style-type: none"> Patrolling on land and sea by Dhimurru Rangers; Undertaking direct management actions, such as feral animal, weed and fire management on land, and removal of ghost nets and other marine debris at sea; Sharing information and resources with IPA collaborating agencies to ensure that all management actions (e.g., by NT Fisheries patrols, biosecurity activities through the North Australian Quarantine Strategy, collaboration with the Australian Government in the management of the proposed Wessel Commonwealth Marine Reserve, etc.) contribute to the management of the IPA; Management is informed by ongoing research and monitoring on land and sea by Dhimurru in collaboration with IPA collaborating agencies.

Phrase	How this phrase applies to the Dhimurru IPA
Legal or other effective means	<p>Dhimurru IPA is managed through a package of legal and other effective means, including:</p> <p>Legal means:</p> <ul style="list-style-type: none"> Aboriginal ownership of the terrestrial areas and the intertidal zone within the IPA under the <i>Aboriginal Land Rights (Northern Territory) Act 1976 (Cth)</i>; Recreation Permits for public access to Aboriginal-owned areas of the IPA issued by Dhimurru Aboriginal Corporation under the <i>Aboriginal Land Rights (Northern Territory) Act 1976 (Cth)</i>; Registration and management of culturally significant sites on land and sea under the <i>Northern Territory Aboriginal Sacred Sites Act 1989 (NT)</i>; Exercise of customary rights to use and manage land and sea areas and natural and cultural resources within the IPA under provisions of the <i>Native Title Act 1993 (Cth)</i>; Collaborative management, training and resource-sharing arrangements under formal agreements with IPA collaborating agencies, such as agreement under section 73 of the <i>Territory Parks and Wildlife Conservation Act 1977 (NT)</i>; Recognition of Aboriginal resource use rights in other Northern Territory and Commonwealth legislation, such as the <i>Fisheries Act (NT)</i> and the <i>Environment Protection and Biodiversity Conservation Act (Cth)</i>; Exercise of statutory authority of Northern Territory and Commonwealth agencies under their respective legislation to contribute to the agreed goals of the IPA; <p>Other effective means:</p> <ul style="list-style-type: none"> Ranger patrols; Removal of ghost nets and other marine debris; Fire, weed and feral animal management; Application of Indigenous knowledge; Visitor use management through education, signage, etc.; Research and monitoring on land and sea; Recording of sacred sites and other cultural knowledge.
... to achieve	<p>The goals and objectives of the IPA are being achieved through development, implementation, and monitoring of a management plan delivered through effective working relationships with collaborating agencies led by Dhimurru Aboriginal Corporation. A governance framework will be established to ensure effective collaboration and to oversee monitoring, evaluation, and reporting.</p>

Phrase	How this phrase applies to the Dhimurru IPA
Long term	<ul style="list-style-type: none"> Dedication of land and sea country as part of the IPA reflects the customary obligation of Traditional Owners and Custodians from time immemorial to protect their land and sea country for all natural and cultural values, including sustainable use of customary resources, for present and future generations;
Conservation	<ul style="list-style-type: none"> The primary goal of the IPA is to maintain terrestrial and marine ecosystems in their current healthy condition into the future. The expansion of the IPA to include additional sea country recognises the interdependence of terrestrial and marine ecosystems, natural values, and cultural values, and hence the need to manage land and sea environments within a single collaborative protected area framework. The need for integrated land and sea management is particularly acute in the context of climate change, which is causing sea level rise, coastal erosion, and saltwater intrusion into freshwater wetlands. Currently there are no mining exploration leases or mining activities within the geographical space of the expanded IPA and there is currently an NT government-imposed moratorium on seabed exploration and mining in the Northern Territory. Recognition as a protected area, identification of the natural and cultural values, further research, and collaborative management will assist in ensuring that if a mining proposal emerges in the future it will be addressed in a manner compatible with maintaining the integrity of the IPA.
Nature	The conservation goals of the IPA include the conservation of biodiversity at population, species and ecosystem level, as well as broader natural values which are inextricably linked to Traditional Owners and Custodians' culture, identity, and way of life.
Associated ecosystem services	<p>Traditional Owners and Custodians are committed to maintaining the ecosystem services currently provided within the land and sea environments of the expanded IPA. These include:</p> <ul style="list-style-type: none"> Provision of food, including Indigenous customary food through hunting and gathering, as well as recreational and commercial fishing through sustainable management of these activities; Provision of clean fresh water to Traditional Owners and Custodians living on country, as well as townships and other settlements dependent on water supplies from streams and ground water within the IPA; Provision of a wide range of cultural, recreational, spiritual, and religious services through maintaining healthy environments and abundant natural and cultural resources; Provision of fundamental ecological services, including nutrient cycling, to enable the proper functioning of terrestrial and marine ecosystems.
Cultural values	<p>Cultural values associated with the IPA, which are inextricably linked to the IPA's natural values, include:</p> <ul style="list-style-type: none"> The sacred currents including Manbuynga ga Rulyapa that come together to form the seas off our homelands Clan estates of the Dhuwa and Yirritja moieties on land and sea; Sacred sites on land and sea; Ancestral Tracks that trace the mythological journeys of creation ancestors and which link land and sea environments; Indigenous knowledge, ceremonies, stories, and cultural practices that will be strengthened and transmitted across generations through the integrated management of land and sea environments within the IPA collaborative framework.

APPENDIX 2

Allocation of the Dhimurru IPA to IUCN Protected Area Category V (Protected Landscape/Seascape)

	IUCN Category 5	Dhimurru IPA
Description	Areas where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value; and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.	Dhimurru IPA is a geographical space of land, sea and sky created by the Ancestral Spirit Beings of the Dhuwa and Yirritja moieties. The journeys of these ancestral creators crisscrossed the land and seascape breathing life into the animals and plants inhabiting these environments and creating sacred currents. From these ancestral journeys, and the network of important sites created across the land and sea, we gain our names, our identity and our way of life.
Primary objective	To protect and sustain important landscapes/seascapes and the associated nature conservation and other values created by interactions with humans through traditional management practices.	To protect and sustain our landscapes/seascapes, including biodiversity, ecosystems and our associated ceremonies, cultural sites, and other cultural values and practices that we have nurtured for thousands of years.
Other objectives	<ul style="list-style-type: none"> To maintain a balanced interaction of nature and culture through the protection of landscape and/or seascape and associated traditional management approaches, societies, cultures and spiritual values; To contribute to broad-scale conservation by maintaining species associated with cultural landscapes and/or by providing conservation opportunities in heavily used landscapes; To provide opportunities for enjoyment, well-being and socioeconomic activity through recreation and tourism; To provide natural products and environmental services; To provide a framework to underpin active involvement by the community in the management of valued landscapes or seascapes and the natural and cultural heritage that they contain; To encourage the conservation of aquatic biodiversity; To act as models of sustainability so that lessons can be learnt for wider application. 	<ul style="list-style-type: none"> To maintain a balance between the cultural, economic, and recreational values and the cultural, social and spiritual values associated with Dhimurru IPA; To ensure ecological sustainability of cultural, economic and recreational use of land and sea resources within the IPA; To provide opportunities for enjoyment, well-being, and socioeconomic activity through recreation and tourism; To maintain environmental services provided by land and sea country within the IPA; To provide a collaborative framework for the governance and management of the IPA that respects the rights and obligations of Traditional Owners and Custodians, government management agencies, commercial fishers, recreational fishers, tourism operators, and local residents; To act as a model for Traditional Owner led collaborative management of an integrated land/sea Indigenous Protected Area.

APPENDIX 3:

Strategy 6 of North Commonwealth Marine Reserve Network

Indigenous people and management of Commonwealth Marine Reserves ³⁹

The Indigenous peoples of northern Australia have been sustainably using and managing their sea country, including areas now included within Commonwealth marine reserves, for thousands of years. Many Indigenous people recognise and maintain links to cultural places on islands that are now submerged often long distances out to sea. They continue to rely on coastal and marine environments and resources for cultural identity, health and wellbeing, and economic activities. The saltwater people of the North belong to discrete clan estates and language groups that occupy, or traditionally occupied, discrete areas or country. ‘Country’ refers to a place of origin – literally, culturally or spiritually and ‘sea country’ and/or ‘saltwater country’ are terms that refer to an estate or cultural domain in which no separation between land and sea is made.

In many locations, Indigenous communities have developed Ranger capabilities. Indigenous Rangers play a significant role in the management of coastal and marine resources. Activities undertaken include monitoring of the coastline for illegal fishing, protection of native flora and fauna, quarantine surveillance, cleaning up of marine debris (including ghost nets) from beaches, and research into and protection of key species such as dugongs and marine turtles.

The Australian Government recognises and respects the knowledge Indigenous people have in managing Australia's land, fresh water and sea, and in conserving biodiversity. It recognises Indigenous Australians as key partners in managing Australia's environment and cultural heritage.

Native Title is a term that refers to the recognition in Australian law that some Indigenous people continue to hold rights to their lands and waters that come from their traditional laws and customs. The *Native Title Act 1993* provides for the recognition of native title on land and in the sea. Section 8 of the *EPBC Act* provides that the Act does not affect the operation of the *Native Title Act*.

Indigenous people can contribute to the management of marine reserves networks through sharing knowledge and understanding of the marine environment and through participation in the management and sustainable use of the resources of these reserves.

Actions

The Director will:

- Drawing on the significant body of knowledge built as part of sea country planning and similar initiatives across Australia, and in consultation with relevant representative organisations, consolidate and communicate information about cultural values protected in the North Commonwealth marine reserves
- Identify, and where feasible support, opportunities for Indigenous people to engage in the management of sea country in Commonwealth marine reserves, for example through the delivery of critical management services, such as monitoring surveillance, compliance and research.
- Build effective partnerships with Indigenous communities and organisations that have an interest in the Marine Reserves Network.
- Comply with the requirements of the *Native Title Act 1993*.

Outcomes

- Indigenous people and organisations are partners in the management of sea country within Commonwealth marine reserves.
- Management activities within Commonwealth marine reserves acknowledge and respect existing Indigenous governance arrangements, activities and cultural needs.
- Indigenous customs, practices and knowledge inform relevant management planning and activities.

APPENDIX 4

Dhimurru IPA Governance and Management Collaboration

Governance and management contributions from IPA collaborating agencies

	<p style="text-align: center;">Dhimurru Aboriginal Corporation (under direction by Yolŋu Traditional Owners and Custodians)</p>	
Commitment	<ul style="list-style-type: none"> • Commitment to IPA goals 	
Authority	<ul style="list-style-type: none"> • Customary authority over cultural sites, knowledge, and practices under Yolŋu Law • Ownership of land and intertidal zone under <i>Aboriginal Land Rights (NT) Act</i> • Native title rights and interests under <i>Native Title Act 1993 (Cth)</i> • Right to traditional resource use under section 53(1) <i>Northern Territory Fisheries Act 1998 (NT)</i> and under section 122 of the <i>Territory Parks and Wildlife Conservation Act</i> • Registration and protection of sacred sites under <i>Northern Territory Sacred Sites Act 1989 (NT)</i> • Traditional use for hunting, food gathering, ceremonial and spiritual purposes, including in Commonwealth Reserves, recognised under Sections 303BAA and 359A of the <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i> 	
Responsibility	<ul style="list-style-type: none"> • Care for Country and Culture • Sustainable use of natural and cultural resources 	
Capacity	<ul style="list-style-type: none"> • Dhimurru Aboriginal Corporation – governance, management, infrastructure, and resources • Rangers, vehicles, boats and other equipment to manage and monitor land and sea country 	

	<p>Commonwealth Department of the Prime Minister and Cabinet and the Department of the Environment</p>	
<p>Commitment and/or Support</p>	<ul style="list-style-type: none"> • Support IPA Goals and Objectives through funding arrangements and agreements in line with approvals • Support Indigenous capacity in natural resource management through Caring for Our Country (including Indigenous Protected Area and Working on Country programs) • Support Indigenous involvement in the management of sea country within Commonwealth marine reserves • Identify and, where feasible, support opportunities for Indigenous people to engage in the management of sea country in Commonwealth marine reserves, for example, through the delivery of critical management services such as monitoring, surveillance, compliance, and research 	
<p>Authority</p>	<p>Under provisions of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth):</p> <ul style="list-style-type: none"> • Assessment of Commonwealth Managed Fisheries (Sections 147-154) • Planning and management of Wessel Commonwealth Marine Reserve, which intersects with the proposed IPA, including: <ul style="list-style-type: none"> • Implementation of Strategy 6 of the <i>North Commonwealth Marine Reserve Network Management Plan</i> re support for the involvement of Indigenous people • Collaboration on research, monitoring, information-sharing, and protocols for data management • Consolidate and communicate information about cultural values protected in the North Commonwealth Marine Reserves Network (including Wessel marine reserves) • Implementation of Marine Bioregional Plan for North, e.g., <ul style="list-style-type: none"> • Develop targeted collaborative programs to coordinate species recovery and environmental protection efforts across Australian Government, state and territory agencies, and coastal communities with responsibilities for the marine environment – collaborate with the Queensland and Northern Territory governments and coastal communities to develop protection measures to limit disturbances during the nesting season for marine turtles, the breeding season for inshore dolphins, the pupping season for sawfishes and river sharks, and in foraging areas for dugongs, focusing on areas in proximity to inhabited areas or areas where sources of disturbance exist or are emerging (regional priorities 1, 2 and 4—short to medium term; regional priority 3—medium term). • Increase information on the sources and impacts of marine debris on the region’s marine life and ecosystems, including supporting monitoring of marine debris at selected locations in and adjacent to the North Marine Region (regional priority 7—short to medium term). • Recognition of Indigenous rights to hunt, gather, and use traditional resources • Protection of matters of national environmental significance • Protection of threatened and endangered species • Mandate for program support to deliver environmental outcomes 	

	<p>Commonwealth Department of the Prime Minister and Cabinet and the Department of the Environment (continued)</p>	
<p>Responsibility</p>	<ul style="list-style-type: none"> • Program implementation – IPA, WoC, and other land and sea programs • Support and advice for Indigenous organisations managing funding agreements • Communicate program outcomes within and external to government • Reporting and contributions to Australian Government’s Closing the Gap agenda • Protect the marine environment, especially those aspects of the environment that are matters of national environmental significance (such as the Commonwealth waters and Commonwealth marine reserves), as well as protection and conservation of heritage • Promote ecologically sustainable use of natural resources • Promote a co-operative approach to the protection and management of the environment involving governments, the community, Indigenous peoples, and other land-holders • Assist in the co-operative implementation of Australia’s international environmental responsibilities • Recognise the role of Indigenous people in the conservation and ecologically sustainable use of Australia’s biodiversity • Promote the use of Indigenous peoples’ knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge 	
<p>Capacity</p>	<ul style="list-style-type: none"> • To make available relevant departmental staff for involvement in meetings of the Dhimurru IPA Advisory Group and for site visits within the IPA as may be required from time to time. • To provide program and policy advice to Dhimurru on government processes 	
<p>Other</p>	<ul style="list-style-type: none"> • Networking opportunities <ul style="list-style-type: none"> – e.g., IPA managers’ meetings and international Indigenous Rangers conferences • Research involvement and linkages <ul style="list-style-type: none"> – e.g., current Indigenous Land and Sea Management Effectiveness research project 	

	NT Department of Primary Industry and Fisheries	
Commitment and/or Support	<ul style="list-style-type: none"> Implement the Northern Territory Indigenous Fisheries Development Strategy⁴⁰ Increased role for Indigenous engagement in: <ul style="list-style-type: none"> Fisheries management, monitoring, and compliance Fisheries research Fishing businesses 	
Authority	<p>Under the authority of the <i>Northern Territory Fisheries Act 1998</i> (NT):</p> <ul style="list-style-type: none"> Manage the aquatic resources of the Territory in accordance with the principles of ecologically sustainable development Delegation from Executive Director to provide support and build capacity of Indigenous sea country Rangers Fishery Management Plans 	
Responsibility	<ul style="list-style-type: none"> Stewardship of aquatic resources that promotes fairness, equity and access to aquatic resources by all relevant groups, including Indigenous people, commercial operators, aquaculture farmers, amateur fishermen and others; Take a precautionary approach to the management of aquatic resources and their habitats to promote the optimum utilisation of aquatic resources to the benefit of the community Oversee licensing and compliance with rules and regulations Collect “catch and effort” data to inform fisheries management 	
Capacity	<ul style="list-style-type: none"> Fisheries managers, research scientists and technical support, and Indigenous Development Unit. Enforcement officers (Water Police) with vessels and other resources NT Fisheries policy for Indigenous marine Rangers to research and monitor sea country Support Indigenous development: <ul style="list-style-type: none"> Resource management and compliance Business mentoring support (seafood industry) Governance for Indigenous engagement 	
Other	<ul style="list-style-type: none"> Involvement in developing ‘Blue Mud Bay’ agreements relating to access and use of resources in intertidal zone owned by Traditional Owners and Custodians 	

40. http://www.nt.gov.au/d/Fisheries/Content/File/indigenous/Indigenous_Fisheries_Development_Strategy.pdf
 This refers to agreements that may arise from the ‘Blue Mud Bay’ High Court decision that determined Traditional Owners and Custodians of coastal land under the Aboriginal Land Rights (Northern Territory) Act 1976 (Cth) have authority to control access to intertidal waters.

	NT Department of Land Resource Management	
Commitment and/or Support	<ul style="list-style-type: none"> Provide technical and scientific information, advice and expertise on natural resource management issues and policy, including biodiversity, weeds, and water Provide access to spatial environmental data layers (including biodiversity data) and GIS capability Support for increased Indigenous engagement in: <ul style="list-style-type: none"> biodiversity management, monitoring and compliance biodiversity monitoring and research sustainable use of wildlife resources 	
Authority	<p>Under the authority of the <i>Territory Parks and Wildlife Conservation Act</i>, and via the Parks and Wildlife Commission NT, the <i>Water Act</i>, and <i>Weeds Management Act</i>:</p> <ul style="list-style-type: none"> Protect, conserve and sustainably use the wildlife (biodiversity) of the Territory, excluding aquatic life (as defined under the NT Fisheries Act) but excepting marine mammals and reptiles Wildlife Management Plans Prevent the spread of weeds, ensure integrated weed management and community responsibility in implementing weed management plans 	
Responsibility	<ul style="list-style-type: none"> Providing scientific expertise and advice on biodiversity (as defined above), including for wildlife permits Managing the sustainable use of wildlife resources Providing advice for wildlife permits Maintaining and providing appropriate access to the NT-wide flora and fauna databases 	
Capacity	<ul style="list-style-type: none"> Research scientists and technical support Ability to provide biodiversity (including invasive species) information, advice and training 	
Other	<ul style="list-style-type: none"> Collaborate on specific agreed research projects 	

	Northern Territory Seafood Council	
Commitment and/or Support	<ul style="list-style-type: none"> Support IPA goals and objectives through industry developed publications (such as Environmental Management System, Codes of Practice and Codes of Conduct) 	
Authority	<ul style="list-style-type: none"> Northern Territory Seafood Council Incorporated constitution and objectives: <ul style="list-style-type: none"> To promote, encourage and assist the Northern Territory's commercial seafood industry and persons and groups involved in it To promote, engage in, encourage and assist research, conservation and other activities beneficial to the interests, persons and groups of the Northern Territory commercial seafood industry generally The promotion of the development of the Northern Territory's fishing and aquaculture resources 	
Responsibility	<ul style="list-style-type: none"> To provide a representative voice, and a single contact point for the seafood industry, promoting the industry through information sharing and policy development To deliver cost effective services and industry-driven research and a framework for the development of a responsible seafood industry 	
Capacity	<ul style="list-style-type: none"> To make available relevant NTSC staff and/or NTSC Board members for involvement in meetings of the Dhimurru IPA Advisory Group To work collaboratively with stakeholders in the development/revision of industry developed publications relating to best practice and conduct 	

	Tropical Ecosystems Research Centre Commonwealth Scientific and Industry Research Organisation (CSIRO)	
Commitment and/or Support	<p>CSIRO will support the Dhimurru IPA Goals and Objectives through:</p> <ul style="list-style-type: none"> The provision of expert scientific advice Co-developed research partnerships that address land, coastal and marine issues, and the connections between them Networking Dhimurru with the broader research community, both nationally and internationally The provision of training and mentoring opportunities for Dhimurru rangers 	
Authority	(Not applicable)	
Responsibility	<ul style="list-style-type: none"> CSIRO's Tropical Ecosystems Research Centre, together with our partners, aims to deliver innovative solutions to the complex challenges that arise from the demands and impacts of human activities on the environment across northern Australia 	
Capacity	<ul style="list-style-type: none"> Internationally leading expertise in terrestrial, coastal and marine sciences Extensive experience working with Indigenous communities and organisations, including Dhimurru Extensive scientific networks, both nationally and internationally 	

	Amateur Fishermen's Association of the Northern Territory Inc. (AFANT)	
Commitment and/or Support	<ul style="list-style-type: none"> Support IPA goals and objectives through communication and enhancement programs for recreational fishing and tourism To work and liaise collaboratively with stakeholders in the development of best practice management principles in the Dhimurru IPA 	
Authority	<p>AFANT is the organisation recognised by both the Northern Territory and Commonwealth Governments as the peak body representing the estimated 50,000 Northern Territory residents who frequently participate in recreational angling each year.</p> <p>AFANT's objective through our constitution is to recreational fishing in the NT and ensure the quality of our sport. includes:</p> <ul style="list-style-type: none"> To act as an advisory body for recreational and sport fishers in the Northern Territory To promote recreational and sport fishing in the Northern Territory To co-operate with all research organisations and other bodies whose aims and objectives are to further the knowledge of fish species and their environments To make public scientific and recreational information that is of interest to recreational and sport fishers To provide a forum for recreational and sport fishers To actively participate in the drafting of rules and regulations of concern to recreational and sport fishing To liaise with other groups and bodies holding similar interests To take an active interest in any environmental issues that may be raised in conjunction with recreational and sport fishing Establish and maintain communication and discussion with relevant government agencies, ministers and departments at all levels of government Develop an educational program for recreational and sport fishing in NT Promote legal and ethical recreational and sport fishing practices Promote scientific research, conservation and management of fish, their environment and ecology 	
Responsibility	<ul style="list-style-type: none"> Representing the recreational anglers of the Northern Territory on multiple management advisory committees dealing with key recreational fish and crustacean species as well as a diverse group of natural resource management advisory groups, recreational fishing steering committees and the water safety advisory council in the Northern Territory Providing the opportunity for the recreational fishing industry to have a say on the day to day management of fisheries, input to policy development and the forward planning of sustainable development 	
Capacity	<ul style="list-style-type: none"> To make available relevant AFANT staff and/or Committee members for involvement in meetings of the Dhimurru IPA Advisory Group 	

APPENDIX 5

Weed Classification, Control Techniques and Control Time

Weeds in IPA	Classification	Control Technique	Control Time
Mission Grass	B, C	Spraying, Hand Pulling	Dec – March
Mossman River Grass	B, C	Spraying, Hand Pulling	Dec - March
Coffee Bush	None	Spraying, Cut and Swab	All year
Candle Bush	B, C	Spraying, Cut and Swab	Dec - April
Coffee Senna, Sicklepod	B, C	Spraying, Hand Pulling	Dec – April
Caltrop	B, C	Spraying, Hand Pulling	Dec – March
Gamba Grass	A, B, C	Spraying, Burning	Dec - March
Grader Grass	B, C	Spraying	Dec – March
Hyptis	B, C	Spraying, Hand Pulling	Dec – March
Salvinia	B, C	Hand Removal	Jan – Dec
Passiflora	None	Spraying	Dec - March
Snakeweeds	B, C	Spraying	Dec – March
Sida	B, C	Spraying	Dec – March
Neem	None	Cut and Swab	March – May
Golden Shower	None	Cut and Swab	All Year
Cotton Bush	None	Spray	Dec – March

Recreation Area Weeds and Priorities

RECREATION AREAS	WEEDS	PRIORITY
Galaru	Mission Grass, Caltrop, Mossman River Grass	High
Wirrawuy	Caltrop, Mossman River Grass	Medium
Middle Beach	Caltrop, Mossman River Grass	Medium
Gadalathami	Caltrop, Mossman River Grass	Medium
Gumunihya	Caltrop, Mossman River Grass	Medium
Lombuy	Caltrop, Mossman River Grass	Medium
Dump Site near Lombuy	Mission Grass, Hyptis, Golden Shower, Cotton Bush, Coffee Senna	High
Ski Beach	Mission Grass, Coffee Bush	High
Latram	Caltrop, Mossman River Grass	Medium
Goanna	Caltrop, Mossman River Grass	Medium
Yarrapay	Caltrop	Low
Baringura	None Identified as yet	Low
Numuy	Hyptis, Coffee Senna, Sida, Caltrop	Medium
Macassans	Coffee Bush, Caltrop, Mossman River Grass	Medium
Binydjarrnga	Mission Grass, Coffee Senna, Hyptis, Coffee Bush	High
Guwatjurumuru	Caltrop, Mossman River Grass	Low
Scout Camp	Caltrop, Mossman River Grass	Low
Ganami Wonga	Caltrop, Mossman River Grass	Low
Gaparu	Caltrop, Mossman River Grass	Low
Wanuwuy	Caltrop, Mossman River Grass, Mission Grass	High
Nhulun	Passiflora, Mission Grass, Hyptis, Caltrop, Mossman River Grass	High
Ganinyara	Caltrop, Mossman River Grass	Medium
Dhambaliya	Coffee Bush	High
Gulkala Houses	Mission Grass, Hyptis	High
Gulkala	Mossman River Grass, Mission Grass	High
Galkila Homelands	Mission Grass, Hyptis	High
Rainbow Cliffs	Caltrop, Mossman River Grass	Medium
Gayngaru	Mission Grass, Caltrop, Mossman River Grass, Candle Bush, Coffee Bush, Coffee Senna, Hyptis, Snakeweed	High

Note: This list is not exhaustive and may change. High Priority has been given to all areas where Mission Grass has been identified. Mission Grass has the greatest potential for impacting the native habitat of the IPA.

APPENDIX 6

Summary of commercial fishing activities in Northern Territory waters

Managed by the Northern Territory Department of Primary Industry and Fisheries

Fishery	Target Species	Fishing Area ⁴¹	Management Instrument	Sustainability ⁴²	Fishing licences in the IPA
Barramundi	Barramundi ⁴³ <i>Lates calcarifer</i> King Threadfin <i>Polydactylus macrochir</i>	High Water Mark to 3 nautical miles except for closed areas	<i>NT Fisheries Act</i> Barramundi Fishery Management Plan	Determined sustainable by NT Fisheries following reduction in licences to 20 & area closures	3 licences operating in the IPA in Jan 2013
Mud Crab	Giant Mud Crab ⁴⁴ <i>Scylla serrata</i> Orange Mud Crab <i>Scylla olivacea</i>	Tidal mud flats – mostly in Gulf of Carpentaria	<i>NT Fisheries Act</i> Fishing method and size limits regulated	Assessed by the DoE as sustainable ⁴⁵ under EPBC Act	
Spanish Mackerel	Spanish Mackerel <i>Scomboromorus commerson</i>	From coast to limit of AFZ ⁴⁶	<i>NT Fisheries Act</i> Mackerel Management Plan	Assessed by the DoE as sustainable under EPBC Act	1 licence operating in the IPA in Jan 2013
Off-shore Net & Line	Black-tipped Sharks ⁴⁷ and Grey Mackerel <i>S. semifasciatus</i>	HWM to limit of AFZ	<i>NT Fisheries Act</i> Operational Plan for the Sustainable Use of Nth Australian Shark Resources.	Assessed by the DoE as sustainable under EPBC Act	
Finfish Trawl	Red Snappers <i>Lutjanus malabaricus</i> and <i>L. erythropterus</i>	Offshore waters east of Darwin	<i>NT Fisheries Act</i> Managed by NT Joint Fisheries Authority	Assessed by the DoE as sustainable under EPBC Act	
Fishing Tour Operators			<i>NT Fisheries Act</i>		
Trepang	Sandfish <i>Holothuria scabra</i>	NT coastal waters to 3 nautical miles	<i>NT Fisheries Act</i>	Assessed by the DoE as sustainable under EPBC Act	
Demersal	Gold-band and Red Snappers ⁴⁸	15 nautical miles from NT coast to limit of AFZ	<i>NT Fisheries Act</i> and Demersal Fishery Operational Decision Rules	Assessed by the DoE as sustainable under EPBC Act	

Fishery	Target Species	Fishing Area ⁴⁹	Management Instrument	Sustainability ⁵⁰	Current fishing in IPA
Coastal Line	Mainly Black Jewfish L. Jonii and Protoninbea diacathanus	Near shore NT waters	<i>NT Fisheries Act</i>	Fishery currently under review to ensure sustainability	
Coastal Net	Multi-species especially Mullet, Blue Threadfin, Shark & Queenfish	High Water Mark to 3 n. miles from Low Water Mark	<i>NT Fisheries Act</i>	Licence numbers have been reduced to ensure sustainability	
Aquarium	Multi-species	Freshwater, coastal & oceanic to limit of AFZ	<i>NT Fisheries Act</i>		Mostly in waters around Nhulunbuy
Bait Net			<i>NT Fisheries Act</i>		
Mollusc	Molluscs other than cephalopods and bivalves		<i>NT Fisheries Act</i>		
Squid Jigging	Squid	3 nautical miles to limit of AFZ	<i>NT Fisheries Act</i>		

41 More detailed information on fishing areas are provided at: <http://www.nt.gov.au/d/Fisheries/index.cfm?header=Commercial%20Fishing>

42 Information derived from Commonwealth and NT government websites

43 Main target species

44 99% of catch

45 The assessment “demonstrated that the fishery was managed in a manner that did not lead to over-fishing and that fishing operations had minimal impact on the structure, productivity, function and biological diversity of the ecosystem”.

46 AFZ (Australian Fishing Zone) extends to 200 nautical miles from the Australian coastline – the same extent as Australia’s Exclusive Economic Zone (EEZ)

47 Black-tipped sharks include *Carcharhinus tilstoni*, *C. limbatus* and *C. sorrah*

48 Gold-band Snappers (*Pritipomoides multidens*, *P. Typus* and *P. Filamentosus*)

49 More detailed information on fishing areas are provided at: <http://www.nt.gov.au/d/Fisheries/index.cfm?header=Commercial%20Fishing>

50 Information derived from Commonwealth and NT government websites

APPENDIX 7

Intertidal Licence Area 20 Year Settlement

Key agreement provisions

Item 1

Following execution of the DEED, Parties will negotiate an agreement in relation to continuing the Sea Ranger Program – the Sea Ranger Program Agreement and can include third party interests such as Aboriginal corporations or associations.

The Sea Ranger Program Agreement will specify:

- I. Reporting requirements relevant to sea ranger activities
- II. The number of sea ranger operations and the manner in which the operations will be conducted
- III. OH&S requirements
- IV. Other

Item 2

Within 3 years of the commencement date (July 2015) the Territory will:

- I. Draft legislation relevant to enhanced enforcement powers to appropriately trained sea rangers and enhance the viability of the Aboriginal Coastal Licence (Amendments)
- II. Consult with NLC and others on Amendments
- III. Introduce Amendments into Parliament

Item 3

The Territory will provide sea ranger training and education, including but not limited to certificate based compliance training including practical experience in biosecurity monitoring, fisheries research sampling techniques, fisheries surveillance, safety at sea and vessel operations.

Item 4

A voluntary Code of Conduct for recreational and commercial fishers to be finalised in consultation with TO and relevant to all Territory waters (DRAFT has been prepared).

Item 5

Within two years, Parties will work together in consultation with Stakeholders, to create a transparent, fair and accountable process by which the NLC may suspend or terminate or revoke the rights granted to an individual licensee on the basis of the conviction of that licensee of an offence under the Northern Territory Aboriginal Sacred Sites Act (NT).

Item 6

Within three years, the NTG will draft legislation relevant to conviction under the Northern Territory Aboriginal Sacred Sites Act (NT); consult with the NLC on its content and introduce amendments to Parliament.

Item 7

Within one year, the NTG will develop transparent, fair and accountable guidelines for decision making under Regulation 50 of the Fisheries Regulations and provide copy to NLC.

APPENDIX 8

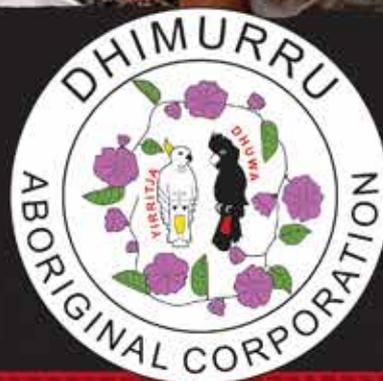
Northern Prawn Trawl Fishery summary information

Target Species	Fishing Area ⁵¹	Management Instrument	Sustainability	Current fishing in IPA
<p>9 prawn species:</p> <p>White Banana <i>Fenneropenaeus merguensis</i></p> <p>Red-legged Banana <i>F. Indicus</i></p> <p>Brown Tiger <i>Penaeus esculentus</i></p> <p>Grooved Tiger <i>P. Semisulcatus</i></p> <p>Blue Endeavour <i>Metapenaeus endeavouri</i> &</p> <p>Red Endeavour <i>M. Ensis</i></p> <p>Scampi, squid, scallops and bugs are also taken</p>	<p>Northern coastal waters from the low water mark to limit of Australian Fishing Zone in between Cape York Peninsula in Queensland and Cape Londonderry in Western Australia</p>	<p><i>Fisheries Management Act 1991 (Cth)</i></p> <p>Northern Prawn Fishery Management Plan 1995 Draft</p> <p><i>Northern Prawn Fishery By-catch and Discarding Work Plan 2012 – 2014</i></p> <p>Northern prawn Fishery Operational Information 2012</p>	<p>Management Plan accredited by the Department of the Environment under EPBC Act, acknowledging that the fishery's actions will not have unacceptable or unsustainable impacts on the environment.</p> <p>Current status: ⁵²</p> <p>Banana Prawns: not overfished</p> <p>Brown Tiger Prawns: not overfished</p> <p>Grooved Tiger Prawns not overfished</p> <p>Blue Endeavour Prawn not overfished</p> <p>Red Endeavour Prawn uncertain</p>	<p>Approx. 2014 catch: 22t prawns 120kg scallops 72kg bugs</p>

⁵¹ More detailed information on fishing areas are provided at:

<http://www.nt.gov.au/d/Fisheries/index.cfm?header=Commercial%20Fishing>

⁵² <http://www.afma.gov.au/managing-our-fisheries/fisheries-a-to-z-index/northern-prawn-fishery/at-a-glance/>



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