

Nyangumarta Warrarn Indigenous Protected Area Management Plan 2022 – 2032 "The good side of this project is getting back and restoring all our significant sites. This makes our feelings and health and wellbeing for us, when we go to Country, the Spirit gets inside of our body and we can feel it and we change, we know we are back home. Once we hit the boundary our nana starts singing as she gets the feeling, and the Spirit comes, and she sings the stories of our grandfather".

Nyaparu Rose

Notes

Warning: This plan may contain images, names of or references to deceased Aboriginal people.

The Nyangumarta Warrarn Indigenous Protected Area Plan 2022–2032 was created through a process of consultation across Nyangumarta Country in 2020 and 2021. It builds on the previous IPA Plan of Management 2015–2020 which involved extensive consultations with the Nyangumarta community between 2010 and 2015.

Nyangumarta Warrarn Aboriginal Corporation gratefully acknowledges the support and leadership from Elders past and present, Nyangumarta Members, Nyangumarta Rangers and program staff who all worked closely to develop this plan. We also acknowledge the support of other partner organisations and look forward to working with them throughout the life of this plan. Further acknowledgements are found in Appendix 4.

Copyright

© All traditional and cultural knowledge in this plan remains the intellectual property of the Nyangumarta People and cannot be used without written consent from the Nyangumarta Warrarn Aboriginal Corporation RNTBC.

Citation: Nyangumarta Warrarn Aboriginal Corporation and Yamatji Marlpa Aboriginal Corporation (2022).

Nyangumarta Warrarn Indigenous Protected Area, Plan of Management, 2022 – 2032.

Further Information

Nyangumarta Warrarn Aboriginal Corporation

Office: Shop 1/24 Clementson St , Broome WA 6725

Post: PO Box 2032 Broome WA 6725

Email: admin@nwac.org.au

List of Acronyms Used in This Plan

CAMBA China-Australia Migratory Bird Agreement

DBCA Department of Biodiversity, Conservation and Attractions

DPaW Department of Parks and Wildlife Western Australia

GSD Great Sandy Desert

IBRA Biogeographic Regionalisation of Australia

IPA Indigenous Protected Area

IUCN International Union for the Conservation of Nature

JAMBA Japan-Australia Migratory Bird Agreement

JMB Joint Management Body

KLC Kimberley Land Council

MERI Monitoring, Evaluation, Reporting, Improving

NIAA National Indigenous Australians Agency

NRM Natural Resource Management

NRS National Reserve System

NWAC Nyangumarta Warrarn Aboriginal Corporation

POM Plan of Management

PNTS Pilbara Native Title Service

RAMSAR Convention on Wetlands of International Importance

Especially as Waterfowl Habitat

RNTBC Registered Native Title Body Corporate

TEK Traditional Ecological Knowledge

YMAC Yamatji Marlpa Aboriginal Corporation

Nyangumarta Orthography

The following orthography for writing and pronunciation of Nyangumarta language is used throughout this report (Geytenbeek unpub. man.).

VOWELS

- **a** As in 'putt'.
- aa As in 'part'; twice as long as 'a'.
- i As in 'pit'.
- ii As in 'peat'; twice as long as 'i'.
- **u** As in 'put'; never ever like 'oo' in 'coo' or 'boot'.
- **uu** As in 'put' but twice as long; not common in English.

CONSONANTS

- **j** Akin to the d in 'dew' or 'due'; it is not like j as in 'Jew'. Made with the tongue flat and the tip touching the back of the top teeth.
- **k** At the beginning of words is like the k in 'skid'. Note that it has no puff of air after it. Elsewhere in words it can sound either that way or like a g.
- I As in English.
- **ly** Like the I in 'million', but with the tongue flat and the tip touching the back of the top teeth.
- m As in English.
- n As in English.
- **ng** As in English.
- ny Like the n in 'new', but with the tongue flat and the tip touching the back of the top teeth.
- **p** At the beginning of words is like the p in 'spin'. Note that it has no puff of air after it. Elsewhere in words it can sound either that way or like a b.



Contents





Our Country and People

Climate and Geography

Nyangumarta Warrarn Country is in Western Australia's northwest Pilbara and southwest Kimberly region. It encompasses over 100 km of Eighty Mile Beach and runs inland into the southern portion of the Great Sandy Desert. The area also incorporates all or part of the pastoral leases of; Wallal Downs, Mandora and Anna Plains Stations. The majority of Nyangumarta Country is located within the Great Sandy Desert and Dampierland Interim Biogeographic Regionalisation of Australia (IBRA) sub regions.

The northwest Pilbara region is comprised predominantly of arid-tropical semi-desert landscapes with an annual rainfall varying from 180 to 300mm per annum. Rainfall is unreliable, however unusually high rainfall resulting from tropical cyclones can occur in the summer months. Tropical cyclones typically form at sea between northern Australia and the Indonesian Islands and travel in a south-westerly direction parallel to the coast, before turning inland. Most cyclones on record have crossed the coast between latitudes 17° and 22° which makes the Pilbara and Nyangumarta Country especially vulnerable to cyclone damage. Summer daytime temperatures often reach 45° C+ (Beard 1975). The Pilbara climate has a bearing on the capacity to conduct field research, especially for health and safety reasons between the months of November to April.

Nyangumarta Culture

Nyangumarta are the Traditional Owners and Native Title Holders of the land and waters within and surrounding the Nyangumarta IPA, and their relationship to Country is rich and complex. For Nyangumarta, Country has cultural significance (including the songs, stories and dances) which define the distinct rights and responsibilities pertaining to each individual depending on their standing within the society. Within the Nyangumarta society all individuals have an obligation to protect and care for Country, and as such the Nyangumarta determined their IPA in accordance with IUCN Category 6, namely, to promote biodiversity and to promote and protect cultural values, beliefs and practices.

Nyangumarta see aspects of Nyangumarta culture as cyclical. Lore, language, Country and kin are fundamentally related to the ancestral past, deceased Nyangumarta persons and transmission to future generations. The foundation for all of the above is 'laid down' in the ancestral past known to Nyangumarta people as *Pukarrikarra* which is commonly described in mainstream Australia as 'The Dreamtime' or 'The Dreaming'.

The basis of contemporary Nyangumarta life is derived from Pukarrikarra, which holds that Ancestral Beings travelled across the earth 'laying down' the social and cultural norms and making these norms binding to all subsequent generations of Nyangumarta People. *Pukarrikarra* is a charter or a blueprint, and a moral code that details the proper conduct of Nyangumarta in daily life. An essential part of this proper conduct is ensuring that the Lore is maintained and transmitted to future generations. One of the most important and fundamental aspects of this Lore is the proper conduct of Nyangumarta persons in relation to Country.

The Ancestral Beings that travelled across the Nyangumarta land and seascapes are eternal; their power is both benign and malevolent. Nyangumarta believe this power is everlasting and resides in sacred objects, in songs and dances and in sites located throughout Nyangumarta Country. Country is to Nyangumarta a mythopoeic landscape/ seascape populated by songs, narratives, rituals, deceased persons and Ancestral Beings. Nyangumarta language is inscribed upon Nyangumarta Country. A supernatural essence dwells in and radiates from places where Ancestral Beings 'came up' and/or 'went in', bestowed names upon, or transformed themselves into features of the contemporary cultural and natural landscapes. These places are highly significant to Nyangumarta People.

Our IPA Journey

The Nyangumarta decision to pursue a declaration of an Indigenous Protected Area (IPA) closely followed the recognition of Nyangumarta's native title which is currently managed by the Nyangumarta Warrarn Aboriginal Corporation RNTBC. NWAC have worked closely with Yamatji Marlpa Aboriginal Corporation (YMAC) for nearly 20 years with their initial application for funding for the IPA and YMAC are still supporting NWAC and the Ranger Team in its management.

Nyangumarta are the Traditional Owners of more than 33,843 km² of Country in north-western Australia extending from approximately 110 kms of coastline along Eighty Mile Beach in the West and approximately 320km deep into the Great Sandy Desert in the East. The native title rights and interests recognised by the Federal Court in most of the Great Sandy Desert determination area are recognised as exclusive possession native title land. The bulk of the determination area lies in the Shire of East Pilbara while a portion of the north-western section lies within the Shire of Broome.

The coastal or western section of the determination area is crossed; in a North-South direction by the former Kimberley – De Grey Stock Route and the bituminised Great Northern Highway, and bisected East to West by the Nyangumarta Highway formerly known as the Kidson Track or Wapet Road. Nyangumarta Country also encompasses all the pastoral leases of Wallal Downs and Mandora stations, and a small southern section of Anna Plains station. Most of Anna Plains station falls within shared determination area,

northwest of the Nyangumarta IPA, which is managed by both the Nyangumarta and Karajarri Ranger teams, with a significant section under a joint management agreement with the Department of Biodiversity, Conservation and Attractions (DBCA) (see Map 1). The Nyangumarta Karajarri Aboriginal Corporation RNTBC are the prescribed body corporate for that area.

The native title rights and interests recognised by the Federal Court in the pastoral lease areas of the Nyangumarta and Nyangumarta-Karajarri determination areas are non-exclusive. Nyangumarta share a very strong connection to the coastal pastoral lease areas, in part based on employment on the Stations dating back to the 1920s and continuing today in the form of fee-for-service land management services conducted by the Ranger team. Burial sites are located all along the coast for cultural reasons, and in cemetery like arrangements on the Stations.

Prior to colonisation Nyangumarta people walked and lived all over their Country and beyond for social, cultural and hunting and gathering purposes. When the pastoralists came, Nyangumarta gradually began to settle close to, or were forced to move onto the coastal stations and nearby Bidyadanga community, formerly La Grange Mission, where the current Ranger base is located, and which is home to a significant number of Nyangumarta residents to this day. When award wages were introduced in the late 1960s an unfortunate consequence was that many Nyangumarta were moved off the stations and as a result Nyangumarta now reside across the Kimberley and Pilbara regions.



"All our values are on that land be it medicine, bush tucker, making boomerangs with the young fellas. The main thing is by going back there with the project; it is to do with our wellbeing. There is a program where they take the young fellas out on Country".

Diane Stewart



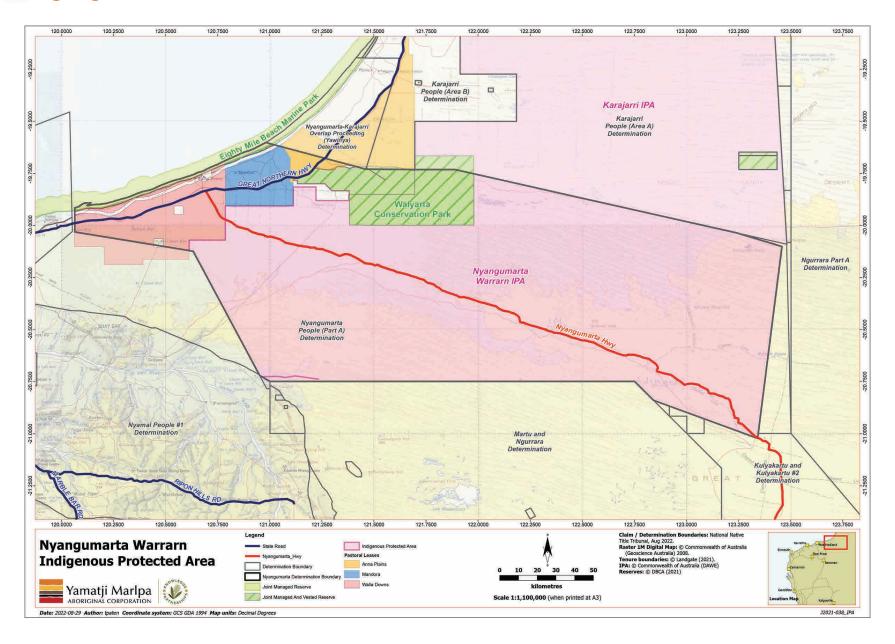
Nyangumarta Warrarn IPA Management Area

The Nyangumarta Warrarn IPA was declared in 2015 and includes the following areas:

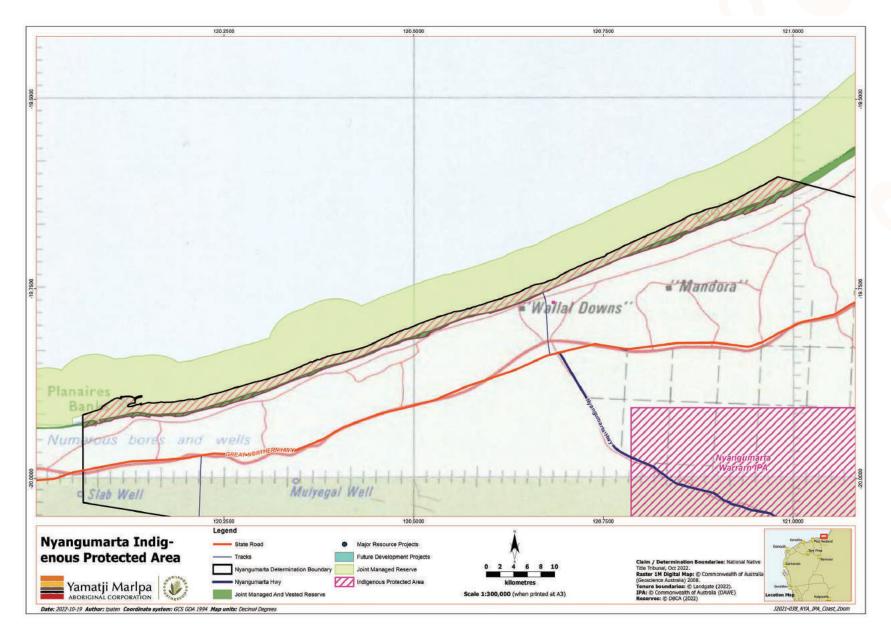
- Pirra Country
 - The Great Sandy Desert area, covering about 26,561 km² (exclusive possession Native Title).
 - Walyarta Conservation Park
- Jurrar Country
 - Kujungurru Warrarn Conservation Park
 - Kujungurru Warrarn Nature Reserve
 - Eighty Mile Beach Marine Park Intertidal Area



Map 1: Nyangumarta IPA and Determination Area



Map 2: Nyangumarta IPA and Determination Area - Coastal Area





Our IPA Governance

Foundation for Decision Making

A Nyangumarta individual's authority is based on extensive knowledge of Country, of cultural traditions, of religious rites and practices. As such knowledge is not equally spread across the entire Nyangumarta group. In Aboriginal society in general it is customary for such knowledge to be acquired over the course of many years. Hence, the most senior members of a Tribe (both male and female) generally hold the bulk of this kind of knowledge (of Country, of cultural traditions, of religious rites and practices etc.) and subsequently have the greatest authority. Gender-restricted knowledge, both male and female is also prevalent in Aboriginal Culture.

Nyangumarta acknowledge that their future and that of the IPA rests with young people. It is very important that old peoples' knowledge is used to guide the activities of the younger generation as outlined in this management plan.

Nyangumarta Warrarn Aboriginal Corporation

Nyangumarta Warrarn Aboriginal Corporation (NWAC) is a registered Native Title Body Corporate established in 2009. The NWAC Board meets regularly to make operational and administrative decisions on behalf of members.

NWAC will oversee the implementation of this plan. Until NWAC decides otherwise, YMAC will assist with the plan and its activities by:

- Preparing and applying for funding to implement this plan;
- Engaging and working with partners or other stakeholders that want to assist in the implementation of this plan;
- Administering the finances; and
- Reporting back to NWAC on progress and finances.

Advisory Committee

The Nyangumarta IPA Advisory Committee meets at least twice a year to provide advice and guidance on the delivery of the work plan by the Rangers. Their role is to ensure that adaptive management is taking place through good Monitoring, Evaluation, Reporting and Improvement (MERI). The Committee is comprised of members of NWAC staff (including senior Rangers), representatives from partner organisations (e.g. Department of Biodiversity, Conservation and Attractions) and invited experts in a particular field (e.g. fire management, biodiversity).

Joint Management

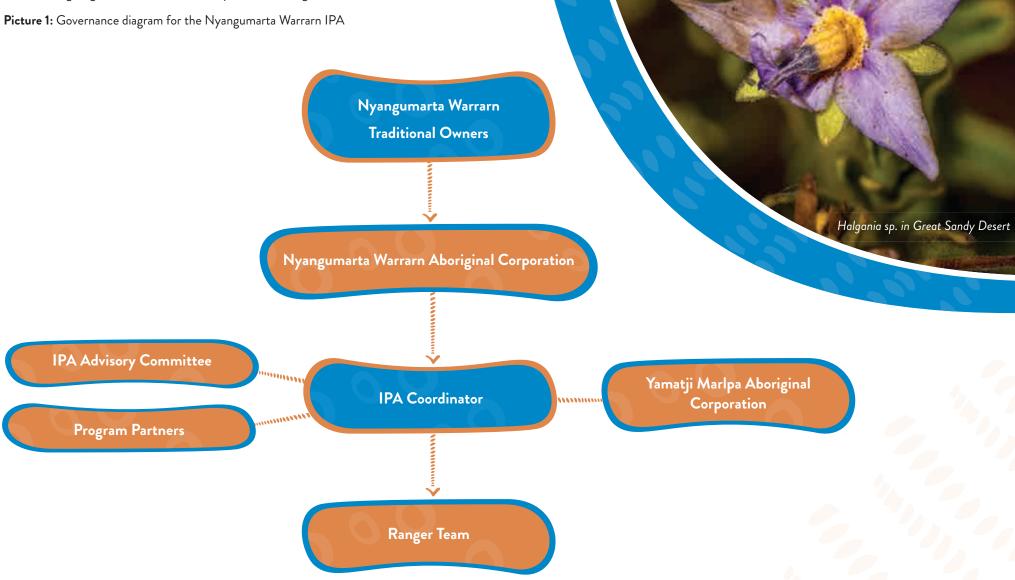
Nyangumarta have a joint management arrangement with the State Government of Western Australia through the Department of Biodiversity, Conservation and Attractions (DBCA). Joint Management Agreements exist for Eighty Mile Beach Marine Park and the terrestrial reserves of Kujungurru and Walyarta areas. The following management plans detail the management aspirations and related strategies of Nyangumarta people for these areas.

- Parks and Reserves of the South-West Kimberley and North-West Pilbara Joint Management Plan 2019; and
- Eighty Mile Beach Marine Park Management Plan 2014-2024.

These agreements are managed by a Joint Management Body (JMB) which is separate from the IPA structure. NWAC will ensure proper coordination between the two initiatives.

Governance/Management Structure of the IPA

The following diagram shows the main components of the governance structure of the IPA.





Our Values

Nyangumarta want to manage Country for conservation and community benefits. The Nyangumarta expression *ngalypa* warrarn; *ngalypa* marrngu (healthy Country; healthy people) sums up this approach and indicates the link between personal and community wellbeing and healthy Country. The values below represent what the important things on Country are for Nyangumarta people. The following pages tell the story of these values and what they incorporate.

- 1. Marrngumili Nyangumarta Law and Culture
- 2. Yinta Important Sites
- 3. Governance and Partnerships
- 4. Nyangumarta People and Pathways
- 5. Pirra Ngurra Desert Country
- 6. Jurrar Ngurra Saltwater Country

Through this plan Nyangumarta will continue to strengthen their connection to Country for themselves but also for their children and future generations. It is through this connection and the values mentioned above that Nyangumarta will remain healthy physically, spiritually, and mentally through future generations.

Nyangumarta people worry about 'threats' to the values. These threats are making Nyangumarta values unhealthy or not as healthy as they should be. When developing goals and strategies for this plan Nyangumarta have considered the important threats that our people can work on to stop or reduce. These threats are detailed on page 23.

Value 1: Marrngumili - Nyangumarta Law and Culture

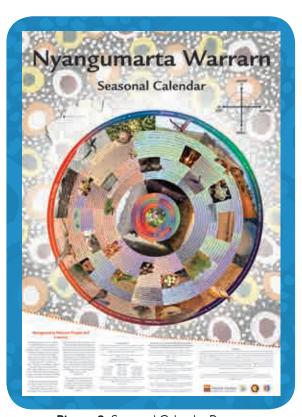
Nyangumarta values, practices and beliefs in regard to Country and Culture are the basis of this management plan and it is vital that Nyangumarta protect and maintain these. This is part of a holistic approach to land management where the landscape, plants and animals within Nyangumarta have been inseparable from Nyangumarta Lore, culture, language and traditional knowledge since creation-time. Nyangumarta see maintenance and protection of the law, culture, language and traditional knowledge as integral with the maintenance and protection of the natural environment.

Nyangumarta collectively hold an extensive body of ecological/ cultural knowledge concerning the bio-physical environment. This extensive knowledge of sites and resources within Nyangumarta Country is coupled with a deep spiritual attachment. Nyangumarta ecological knowledge is inseparable from the knowledge of the supernatural events and forces that shape the Nyangumarta lifeworld. For example, many of the names of flora and fauna as well as rules about how to prepare and cook them or when to pick them have been 'given' to Nyangumarta in Pukarrikarra. Seasonal hunting and gathering patterns are maintained; many of the native title holders regularly travel to Nyangumarta Country to hunt, fish, and gather. However, Nyangumarta all share a concern that the knowledge of the old people needs to be passed on to young people. Typically, the passing on of this knowledge happens on country, but as access to the Desert Country is limited the native title holders see the passing on of this knowledge as central to their aims to manage the IPA.

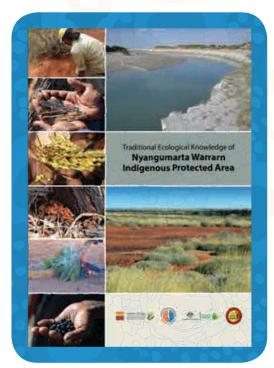
OUR GOALS:

 Nyangumarta Marrngumili (Law and Culture) is kept strong through a mirarngujinarku kurlkapilijinarku (education and awareness) program.

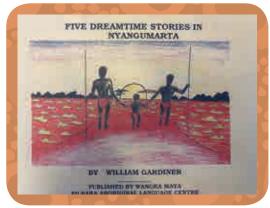
The seasonal calendar poster and Traditional Ecological Knowledge (TEK) book below showcases some of the work that the Nyangumarta Warrarn Elders, Rangers and Corporation have developed to help keep Nyangumarta Law and Culture Strong.



Picture 2: Seasonal Calendar Poster



Picture 3: Traditional Ecological Knowledge Book



Nyangumarta Dreamtime Storybook



Value 2: Yinta - Important Sites

Nyangumarta Country is a living cultural landscape which includes sacred sites, stories and song lines that cross the broader region, linking places and people. Many sites are believed to be created and inhabited by *Pulany* (powerful mythical water snakes) and must be respected and approached in the right way. These sites and the associated knowledge and traditions, demonstrate the long and ongoing connection Traditional Owners have with this area.

Nyangumarta people have stressed that we want to be able to care for and protect these special places (*Yinta*). Examples of *Yinta* sites can be water sources (e.g. *Jila*), old living places, burial sites, rock art sites, ceremonial sites and many others. Of particular importance is ensuring the oral tradition of passing knowledge on from Elder to youth of these sites and the meaning and importance of them. Passing on traditional knowledge of *Yinta* sites is further enhanced and assisted by modern tools and technologies such as online databases and mobile data collectors (e.g. Apps such as FULCRUM).

Nyangumarta people for thousands of years have relied on water places for survival. There are many different types of water places such as *Jilas* (on top water), rock holes, wetlands, springs, diverse wetland types of both saline and freshwater origin, including ephemeral saline lakes and marshes, permanent saline streams, freshwater springs and freshwater peatlands. Many sites are believed to be created and inhabited by *Pulany* (powerful mythical water snakes) and how these places are approached and managed is important.

OUR GOALS

- Priority Yinta places are protected and managed as part of a Nyangumarta cultural heritage management program.
- 2. Young people and Mirtanya and Mirtawari (Elder men and women) are spending time sharing knowledge on Country for protecting Yinta places.



Value 3: Governance and Partnerships

Building strong governance for the Nyangumarta IPA program means establishing good business systems, having and utilising traditional knowledge and decision making through Elder involvement, undertaking adaptive management and having good systems and processes for the day-to-day management of the Rangers.

NWAC have established strong partnerships for the implementation of this management plan with stakeholders and partners currently including Indigenous Desert Alliance including the 10 Deserts Project, the Department of Biodiversity, Conservation and Attractions (DBCA), Environs Kimberley, National Indigenous Australians Agency (NIAA), Kimberley Weeds Network, Indigenous Saltwater Advisory Group and University institutions. These partners and others support the Rangers in their work by providing

technical, networking and financial resources. Future partners will continue to be sought as the program grows.

Strong governance and partnerships of the Nyangumarta Warrarn Aboriginal Corporation and the Nyangumarta Ranger Program have driven the development of the IPA since its dedication in 2015. This can be seen by;

- Increases in the size and capacity of the NWAC/ YMAC staff and Ranger team, including the establishment of a female Ranger team and NWAC general manager.
- Infrastructure development: NWAC office in Broome, Bidyadanga Ranger base, Nyangumarta Highway facilities and Nyiyamarri Pukurl (Eighty Mile Beach block) site.

- Establishing joint management and joint vesting arrangements of previously State managed conservation estate.
- Active leadership and participation in the Indigenous Desert Alliance, 10 Deserts Project, Indigenous Saltwater Advisory Group, and the Kimberley Ranger Network.

Nyangumarta people want to continue this development and slow transition to independence by building on this foundation.

OUR GOALS

 Nyangumarta Warrarn Aboriginal Corporation continue to build governance and management capacity for the successful implementation of this IPA Plan.



Value 4: Nyangumarta People and Pathways

The Nyangumarta IPA relies on Nyangumarta people wanting to be Rangers to look after Country. This is a process that requires the creation of pathways so that young people can be engaged, employed, trained, retained and promoted. Creating a vibrant, productive, and safe workplace that attracts and retains staff is a priority for Nyangumarta people. It also contributes to the overall wellbeing of the Nyangumarta community. Being on Nyangumarta Country 'makes you feel physically and spiritually happy' (Ngarlu nyalpa).

There are ways to help people connect to Country, both directly and indirectly. Having flexible work practices, supportive training and mentoring that help the Rangers to work at their best. Another way is to care for Country using Marrngu and Walypala knowledge while still being able to honour and respect family and cultural responsibility. Having programs that engage youth and help people at risk but also reward hard working kids at school is also important.

When engaging the Nyangumarta community, opportunities will be provided for young, middle aged and older members, male and female and people living in locations such as Broome, Bidyadanga, Port Hedland, Marble Bar and elsewhere.

OUR GOALS

 All Nyangumarta have opportunities to be actively engaged with Nyangumarta Country, culture and programs so that their health and wellbeing is kept strong.



Value 5: Pirra Country (Great Sandy Desert)

Nyangumarta people have an extensive knowledge of and connection with the Great Sandy Desert area. Several of the senior female Elders walked out of the area as young women. Access to the area is limited, in the North a track runs East-West from Walyarta continuing roughly adjacent to the Nyangumarta-Karajarri native title determination boundary. From the South the old Telegraph line track (very rough and overgrown) enters the southwestern part of the claim area via the Callawa track. The Nyangumarta Highway (formerly Kidson Track and WAPET Road) runs approximately West to East beginning at the Great Northern Highway opposite the access road to the Eighty-Mile Beach Caravan Park. As a result of relatively low visitation to and research conducted in the area, very little of the cultural heritage values of the area have been documented and this is a key priority going forward.

The Great Sandy Desert forms the largest part of the IPA. It contains many plants and animals of cultural, social and ecological significance. Medicine and food plants such as *Parntarl* (Desert Walnut), *Kumpaja* (Pindan Quondong), bush meats such as Bush Turkey and Kangaroo and water places sustained Nyangumarta people in the desert for thousands of years. The knowledge on where to find these resources, how to process, store and eat them is important knowledge that needs to be remembered and carried on. Other important animals are also present such as the Greater Bilby, Marsupial Mole, Black Footed Rock Wallaby, Northern Quoll, Echidna, and potentially the Greater Desert Skink and the Night Parrot.

Up until relatively recent times a key management tool for looking after these values had been the use of fire stick farming. Small patchwork burning across the landscape ensured that large areas of high fuel was not built up and hot destructive fires occurred less frequently across the landscape. This method of burning and being connected to Country ensures that ecological and cultural values remained healthy, it is something that the Nyangumarta Rangers are starting to replicate in modern day fire management.

The Great Sandy Desert is also home to large populations of feral camels and smaller numbers of cattle near the boundaries of pastoral stations. These hard-hooved animals can have a significant impact on the health of the desert and need to be managed, particularly when the impact of these animals is in combination with wildfire.

Sitting between Pirra and Jurrar Country is Walyarta, an inland saltwater creek including a series of freshwater springs. It is a site of high cultural and ceremonial significance to Nyangumarta people, and a key location in the central creation song or myth cycle which travels through Nyangumarta Country and beyond. It is known amongst Aboriginal communities across the Pilbara, Kimberley and Western Desert as a major Dreaming place. Nyamaringu is the name Nyangumarta people use to describe the expansive salt marsh associated with the Walyarta area. Mythologically, Walyarta, Nyamaringu and a small coastal creek known as Pilyarlkarra are considered connected by the native title holders. Walyarta is a place of high ecological value containing wetlands and many rare and diverse species of birds and plants.

Of special ecological significance is;

- The complex wetland system associated with Mandora Marsh.
- Walyarta (or Salt Creek) within the Mandora
 Marsh area holds the most inland distribution of
 mangroves (Avicennia marina) in Australia.
 Walyarta is also significant for it microbiolite
 community.
- Mound springs associated with the Mandora
 Marsh area such as Yalayala (Eil Eil) with its
 distinctive tall paperbarks (Melaleuca leucandra);
 also recognised as being important bird nesting
 sites.

OUR GOALS

- The Great Sandy Desert is being actively managed by Nyangumarta and Traditional Owners to protect natural and cultural values.
- Traditional Owners and visitors can respectfully access and enjoy Nyangumarta Pirra Country for education, management, and recreational purposes, as directed by NWAC.

Value 6: Jurrar Country (Eighty Mile Beach)

Nyangumarta people share a strong connection to Eighty Mile Beach and its waters in part due to long-term employment on the stations dating back to the 1920s. Many Nyangumarta people were born on and have been buried on Wallal, Mandora, and Anna Plains stations. The coastline too is dotted with sites of special significance; several of these sites are associated with *Pukarrikarra*.

Today the majority of Nyangumarta population live by the sea and use it for cultural and recreational purposes as well as supplementing the household diet through fresh fish such as whiskered salmon, black tipped reef shark, saw fish, stingrays and oysters.

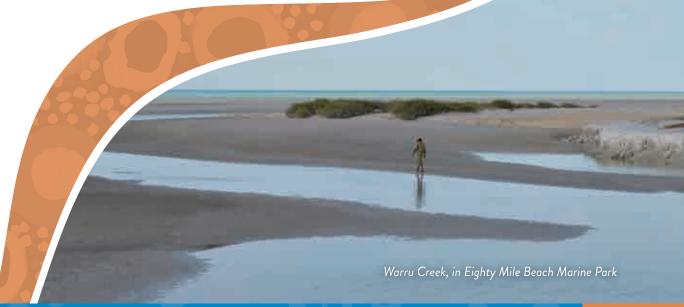
Eighty Mile Beach boasts significant ecological values such as migratory birds and flatback turtle populations. It is one of the ten most populous sites for migratory birds in the asian-australasian flyway (Wade 2004). This status is recognised internationally by RAMSAR convention that covers a 220km+ strip of the Eighty-Mile Beach and the Mandora Marsh. Flatback turtles (*Natator depressus*) are particularly significant as Northern Australia is home to the only nesting population in the world (DEC, Marine Parks & Reserves Authority 2011: 42). Flatback turtles are known to nest on Eighty Mile Beach from November to December and hatch from February to March.

Each year many tourists visit Nyangumarta Country staying at the Eighty Mile Beach Caravan Park and other places for the chance of catching a giant threadfin salmon. The influx of people puts pressure on the fish population and fragile

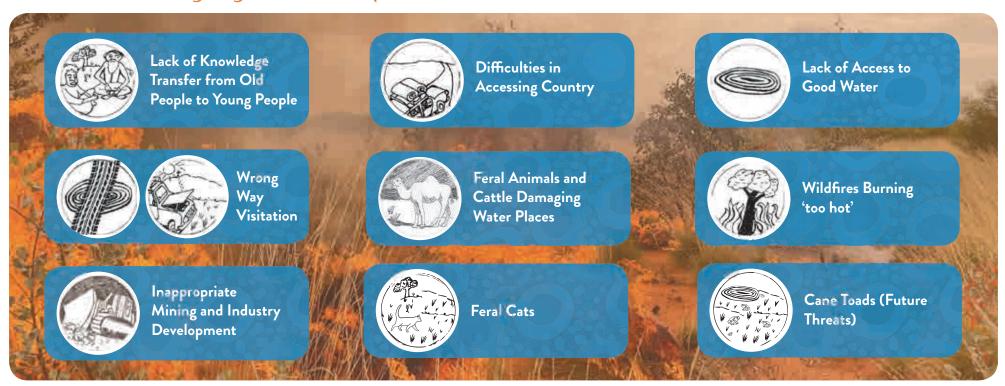
dune systems, which includes places of cultural significance. Nyangumarta people are also concerned about excess shell collection with many people taking shells away from the beach. Nyangumarta are working in partnership with the State Government through the Department of Biodiversity, Conservation and Attractions to help address these issues.

OUR GOALS

- Nyangumarta saltwater resources and habitats are understood, and measures are in place for their protection.
- Traditional Owners and visitors can respectfully access and enjoy Nyangumarta Jurrar Country for education, management, and recreational purposes, as directed by NWAC.



Threats: What Nyangumarta People are Concerned About



Lack of Knowledge Transfer from Old People to Young People

Generally, Nyangumarta people worry about their limited opportunities to pass on knowledge of Country from Elders (Mirtanya and Mirtawarri) to young people. Both young and old share the concern that many old people, the holders of the knowledge, have passed away. Being on Country is the best place to pass on this knowledge. So, passing on knowledge of Country is difficult because Nyangumarta don't live on Country and cannot easily get out onto Country

because it is far from where Nyangumarta now live (and because of the costs involved; fuel etc).

Difficulties in Accessing Country

Related to the issue of knowledge transmission are the difficulties that Nyangumarta face in getting out on Country. There is no community or infrastructure to support a community of Nyangumarta people on their Country. They reside mainly in Bidyadanga, Port Hedland and Broome. Being on Country is the best place for Elders to pass on this knowledge to the younger generation. Getting people out on

Country involves substantial costs, planning, and coordination and raises several health and safety issues, particularly for Elders.

Lack of Access to Good Water

There are currently no accessible, reliable water sources located along the Nyangumarta Highway. Visiting the Great Sandy Desert area for Nyangumarta and the increasing numbers of tourists and mining staff and contractors would be made easier and safer if clean, permanently accessible water sources were available at strategic locations along Highway.

Wrong Way Visitation

Wrong way visitation on Nyangumarta Country is of concern to Nyangumarta as there is concern for both the safety of visitors and for the keeping and respect of Nyangumarta culture values and cultural law. Wrong way visitation includes visitors going to 'culture places' such as Yinta where restricted access rules apply according to Marrnqumili (Nyangumarta Law); inexperienced visitors going to the desert and putting themselves at risk due to the harshness of the desert landscape. Nyangumarta also worry about visitors taking too many fish and shells from Eighty Mile Beach. While Nyangumarta want people to enjoy our Jurrar Country we also want them to have some understanding of, and respect for Nyangumarta values. Nyangumarta feel that tourists should know that much of the IPA is in Country of which Nyangumarta have been recognised as having exclusive possession.

Feral Animals and Cattle Damaging Water Places

Nyangumarta worry that camels and cattle are trampling water places such as springs, soaks and other cultural sites. They have been reported getting bogged in the soft peat soils that surround the *Walyarta* springs and fouling the water. Camels and cattle also eat bush foods, so there are less of these available for people to eat. This is of concern from both a natural and cultural heritage perspective. Water sources, such as rock holes, soaks and springs are of special cultural significance to Nyangumarta. Maintaining and protecting these water sources is particularly important. In recent years Nyangumarta have facilitated large-scale aerial

culling operations together with their neighbours (Karajarri and Ngurrara) to reduce numbers.

Wildfires Burning 'too hot'

Hot summer fires in the Great Sandy Desert area are also worrying, because Nyangumarta see certain kinds of plants and animals disappearing as a result. Summer lightning strikes ignite fires that burn 'too hot' and out of control, primarily because *Marnu* (people) are not there reducing the fuel load by burning in the 'cool time'.

Inappropriate Mining and Industry Development

Interest in Mining and industry development is expanding and ongoing within the IPA and includes such things as gold, nickel, gas, oil, mineral sands and others (see Appendix 1 & 2). Development in the form of increased irrigated agricultural and renewable energies such a solar and wind are also big potential industries. Nyangumarta do not want Country overrun with development, however, also recognise that development can create opportunities for their families and community and believe that under the right conditions mining and development can be beneficial. There is the potential for mining to adversely affect natural and cultural heritage values (e.g. groundwater extraction) so it is essential that Nyangumarta are involved in any discussions that affect Country, culture or community.

Feral Cats

Feral cats pose a big problem on Nyangumarta Country. Cats are well documented in decimating native wildlife populations. In terms of management options, they are complex in nature and require a strategic approach to ensure that resources are well spent. Nyangumarta people do not want to stand back and see cats destroy Nyangumarta values.

Cane Toads (Future Threats)

Cane toads have yet to arrive on Nyangumarta Country however when they do, they will pose a significant problem for native wildlife such as reptiles and birds. Their imminent arrival means that Nyangumarta people need to decide how they will deal with them. Nyangumarta will need to work with partners and neighbours if they are to have any success in managing the threat from the cane toad.





Feral camels and cats caught on camera trap

Implementation

Projects and Strategies

Our projects help us organise our work. Under each project we have strategies that help restore our values, reduce the threats, and develop our capacity.

We have developed goals for each of our values. These goals are a statement of the desired outcome we wish to achieve over the life of the IPA Management Plan. By implementing our strategies, we should see improvement in the overall health of our Country.

The strategies in this plan can be placed into our Nyangumarta Ranger project areas. These project areas also line up with the governments reporting frameworks or project plans.

Nyangumarta Projects Areas area:

- 1. Cultural and Natural Heritage Management
- 2. Fire Management
- 3. Visitor Management
- 4. Native Plants and Animals
- 5. Capability and Capacity Building
- 6. Feral Animal and Weed Management
- 7. Governance and Partnerships

The project areas are also used to structure the Monitoring, Evaluation, Reporting and Improvement (MERI) Plan and can be seen in Appendix 5.

Implementation of this IPA Management Plan will be through work plans. Every year the Rangers, with advice

from the IPA Advisory Committee, will develop and then carry out a work plan. Developing the work plan will involve going through the strategies within this plan and stepping out the following:

- 1. What are the actions that need to happen this year to deliver on the projects and strategies?
- 2. Who is the person responsible for the action?
- 3. When should the action occur?
- 4. What are the desired outputs from doing the action?

See below for an example on making a work plan. The strategy is up the top with the activities down the side.

Strategy: Manage and control weeds						
Action	Responsibility	Cost	Deadline	Output	Comments	
Conduct a survey to find out which weeds are there	Organisation A	\$2000	2 weeks	Weed survey with weeds identified	Involves identifying invasive plants	
Work with locals to do weed removal	Organisation A	\$3500	Spread over 3 months	Weed control group formed	Involves getting locals on board and engaged	



Implementation

Program 1 – Cultural and Natural Heritage Management

STRATEGIES:

- Undertake back to Country trips with young and old people to teach Nyangumarta culture (e.g. school holiday camps);
- Work regularly with Bidyadanga School to incorporate Nyangumarta culture into the curriculum (e.g. Junior Ranger Program and/or two-way learning programs);
- Establish a safe keeping place for storing and using cultural information (Nyangumarta database);
- Develop tools and products to assist Traditional
 Owners in learning language and Traditional
 Ecological Knowledge (TEK) (e.g. Seasonal
 Calendars);
- Support Nyangumarta cultural practices such as law ceremony and dancing to facilitate the transfer of knowledge from Mirtanya and Mirtawari (Elder men and women) to younger people;
- Continue to undertake cultural mapping exercises in *Pirra* Country to document and protect new and old sites, especially targeting rocky outcrops and groundwater dependant sites;
- 7. Work with young and old people to record, language stories and songs for all sites;

- 8. Continue to search for and protect graves and birthing sites on Wallal, Mandora and Anna Plains stations; and
- Develop cultural management zones and protection plans for the Nyangumarta IPA to ensure strategic management and resource use.

Program 2 - Fire Management

STRATEGIES:

- Develop a 5-year fire management operational plan to guide annual fire burning and to build operational capacity; and
- Develop and implement annual fire management plan working cooperatively with partners (Nyangumarta Elders, Researchers, DBCA, KLC fire specialists).

Program 3 - Visitor Management

STRATEGIES:

- Build and maintain infrastructure such as bow shelters, tables/decking, signage, and access tracks at key points to assist in site access for Traditional Owners and visitors (e.g. Saunders Springs, Bore - maya);
- Continue to manage and develop the Nyangumarta Highway permit system and associated infrastructure to build cultural awareness and safety (e.g. interpretive signage) of Nyangumarta Country and raise revenue; and

3. Identify, map and put-up signs for no go areas to ensure safety of everyone.

Program 4 – Native Plants and Animals STRATEGIES:

- Continue to work with partners to build knowledge of threatened species and ecological communities over time in *Pirra* Country to ascertain health of Country and impact of management regime (e.g. long-term biodiversity sites);
- In partnership with Parks and Wildlife undertake flatback turtle and wader bird monitoring and other activities as directed as part of joint management arrangements; and
- 3. Working with Department of Fisheries develop a finfish monitoring program to help inform management of critical finfish, rays and shark populations.

Program 5 – Capability and Capacity Building STRATEGIES:

- Work with partners to develop specialised skills pathways for career and personal development for current and future rangers (e.g. school based trainee programs);
- Ensure active engagement of all Nyangumarta families (Elders and youth) in the population hubs of Broome, Port Hedland and Bidyadanga;

- Develop a Nyangumarta succession and leadership program to support young people into more senior and specialised roles;
- 4. Develop a Junior Ranger Program including school-based trainees to engage young people in ranger work. Focus should be both kids at risk and reward for hard working/attendee students;
- Support the increased engagement and development of women Rangers and provide a safe cultural space for female Rangers and Elders;
- Explore micro enterprise projects such as native seed harvesting, plant propagation and bush medicines;
- 7. Continue to develop Nyiyamarri Pukurl (80MB) as a seasonal ranger base, increasing accessibility to the Program and Country for Nyangumarta living outside of Bidyadanga;
- Undertake and host regular exchange opportunities with other Ranger groups and attend conferences to enable Nyangumarta to be inspired and see different ways of doing things;
- Build capacity of Rangers to partake in cultural tourism activities at Eighty Mile Beach by undertaking tourism training and establishing a simple tourism strategy;
- Continue to contribute and attend regional forums on saltwater management such as the Indigenous Saltwater Advisory Group; and

 Provide regular updates to the Nyangumarta community and NWAC Board through YMAC regular ranger newsletters.

Program 6 – Feral Animal and Weed Management

STRATEGIES:

- Continue to work with partners (e.g. Parks and Wildlife and the 10 Deserts Project) for the management of camels and cattle;
- Continue to work with Parks and Wildlife to install / maintain cattle-proof fencing around Walyarta Conservation Park;
- 3. Continue to monitor for and develop a feral cat eradication program for Nyangumarta Country;
- 4. Monitor and eradicate weeds at key locations (e.g., water points); and
- Together with partners plan for cane toad management strategy to assist in the minimisation of their spread and impact on Nyangumarta values.

Program 7 – Governance and Partnerships STRATEGIES:

 Identify research and operational needs and work with partners (e.g. researchers) and funding providers (e.g. grant makers) to ensure that the IPA Management Plan can be implemented; and Together with rangers and partners (e.g. IPA
 Advisory Group) undertake annual monitoring,
 evaluation, and reporting (including to the
 community) of the IPA implementation to ensure
 adaptive management takes place.



Learning As We Go - Monitoring, Evaluating, Reporting and Improving

It is important that we check our progress, review the effectiveness of our healthy Country work and make required changes to ensure we are on track to reaching our vision. This will be guided by the Nyangumarta Warrarn IPA MERI Plan 2022-2032 (see Appendix 5).

Twice a year Rangers will check each strategy and action in the plan and highlight any issues using a rating guide. This information can be used to give a report card in an annual report.

Reviewing and Evaluating

Over time it is important to look at further monitoring activities to help Nyangumarta understand the success of our IPA Plan

- 1. **Progress Are strategies being implemented?** Progress monitoring is checking whether the strategies and activities have been done on time.
- 2. Outcomes Are activities working? Outcome monitoring is looking at strategies in the plan and checking whether they are achieving their intended outcomes (e.g. less wrong way fire).
- 3. Impact Is Country getting healthier? Impact monitoring involves checking if the health of the value is improving, and things are on-track for reaching the vision.

Reporting

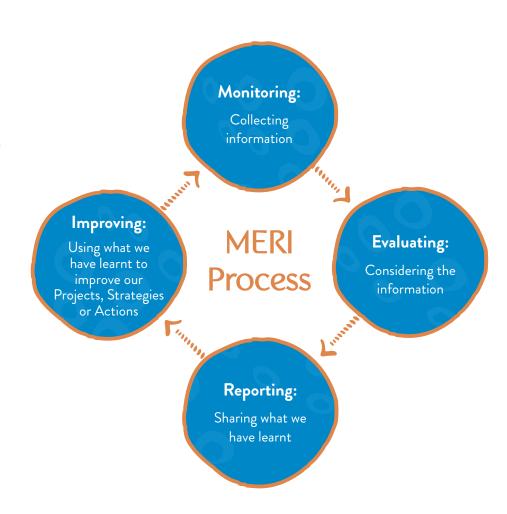
We will report the review and evaluation findings to the Nyangumarta community and Nyangumarta Warrarn Aboriginal Corporation.

We will report to our partners as required under our agreements.

We will also share our learnings more widely e.g. other Indigenous Ranger groups.

Improving

From the monitoring, reviews and evaluations, if we realise that a strategy/action is not achieving the goals we will adapt the strategy/action. Through this process we are continually checking and changing things to make sure we are reducing threats and improving the health of our values.



References

Beard, J.S. 1975 Vegetation Survey of Western Australia: 1: 100,000 Vegetation Series. Explanatory notes to Sheets 1-5. University of Western Australia Press: Nedlands, WA.

Davies, M. 2014 Greening of Pilbara Cities Becomes a Possibility. Ministerial Media Statement: 5 August 2014.

Department of Environment and Conservation 2009. Resource Condition Report for a Significant Western Australian Wetland: Saunders Spring. Prepared for Inland Aquatic Integrity Resource Condition Monitoring (IAI RCM) Project. Department of Environment and Conservation.

Department of Parks and Wildlife 2014. Eighty Mile Beach Marine Park Management Plan 2014-2024.

Dudley, N. (ed.). 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN.

Environment Australia (2001). A Directory of Important Wetlands in Australia, Third Edition. Environment Australia, Canberra.

Geytenbeek, B. 1991. Interim Working Copy of the Nyangumarta- English Dictionary. Unpublished manuscript.

Graham, G (ed.) 1999. A Land Management Assessment of Mandora Marsh and its Immediate Surrounds. Department of Conservation and Land Management.

Graham, G. 2001. "Great Sandy Desert 1 (GSD1 – McLarty subregion)" in A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002, pp 326-331.

McGregor M., Hart Q., Bubb A., and Davies R. (editors) 2013. Ninti One Limited.

Managing the impacts of feral camels across remote Australia final report of the Australian Feral Camel Management Project. Australian Government, Canberra, ACT.

Resolve Global, 2011 Ngalpa Warrarn Conservation Program: Eighty Mile Beach (NyiyamarriPukurl) Feasibility Assessment - Aboriginal cultural and environmental interpretation centre, Resolve Global Pty Ltd, Perth.

Rule Book of Nyangumarta Warrarn Aboriginal Corporation RNTBC. July 2009.

SEWPaC Commonwealth of Australia One Land – Many Stories: Prospectus of Investment 2013 – 2014.

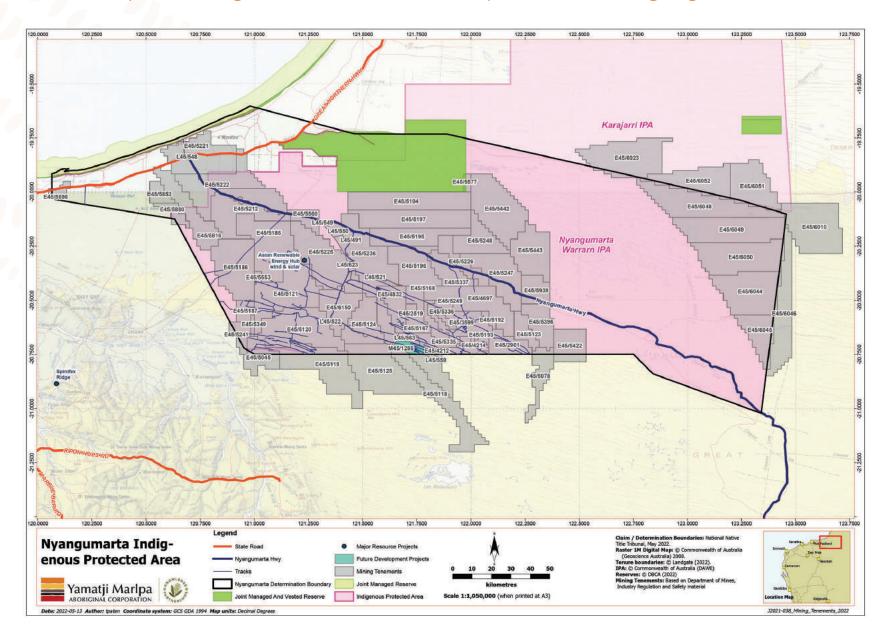
Thomas, Lee and Julie Middleton. 2003. Guidelines for Management Planning of Protected Areas. IUCN Gland, Switzerland and Cambridge, UK.

Wade, S. 2004. Using Spatial Analysis to Aid in Managing Eighty-Mile Beach, Western Australia. Unpublished Manuscript. MSc Thesis submitted Central Washington University, USA. http://onlinegeographer.com/80mile/Wade_80MB_thesis.pdf accessed 06/06/2014.

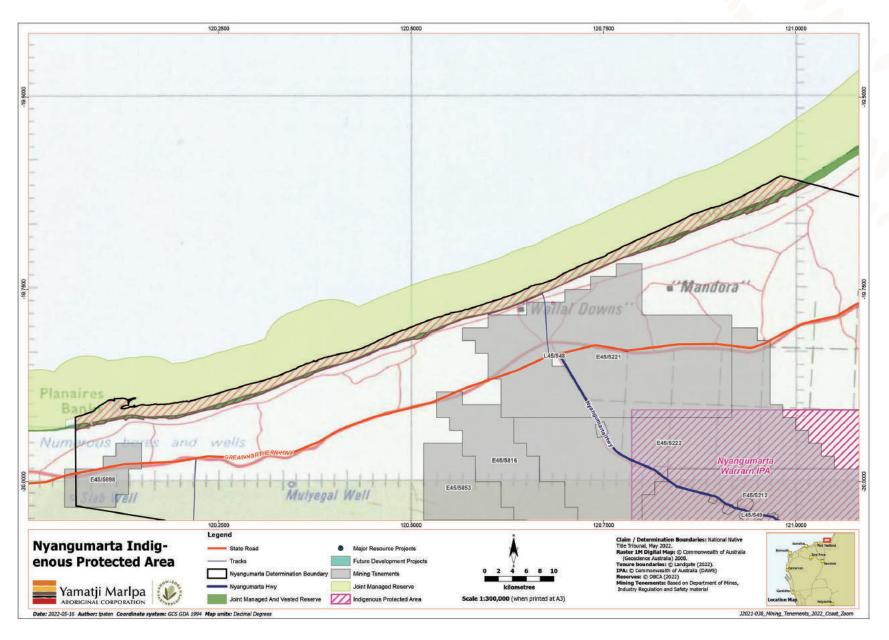
Willing, T. & T. Handasyde. 1999. 'Vegetation & Flora' in G. Graham (ed.) A Land Management Assessment of Mandora Marsh and its Immediate Surrounds. Department of Conservation and Land Management.

Yu, S. 2000. Ngapa Kunangkul: Living Water. Report into the Aboriginal cultural values of ground water in the La Grange sub-basin. Prepared by Centre for Aboriginal Research, UWA for Waters and Rivers Commission WA.

Appendix 1 – Map of Mining Tenements and Development on the Nyangumarta IPA



Appendix 2 - Map of Mining Tenements and Development on the Coastal Nyangumarta IPA





Appendix 3 – IUCN Protected Area Category

Category VI: Protected Area with Sustainable Use of Natural Resources

Category VI protected areas conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area.

Primary Objective

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

Other Objectives

- To promote sustainable use of natural resources, considering ecological, economic and social dimensions;
- To promote social and economic benefits to local communities where relevant;
- To facilitate inter-generational security for local communities' livelihoods – therefore ensuring that such livelihoods are sustainable;
- To integrate other cultural approaches, belief systems and worldviews within a range of social and economic approaches to nature conservation;

- To contribute to developing and/or maintaining a more balanced relationship between humans and the rest of nature;
- To contribute to sustainable development at national, regional and local level (in the last case mainly to local communities and/or Indigenous peoples depending on the protected natural resources);
- To facilitate scientific research and environmental monitoring, mainly related to the conservation and sustainable use of natural resources.

Appendix 4 – Acknowledging Our Partners

NWAC has been building partnerships during the journey to a successful native title determination and beyond. Nyangumarta people understand that increasing collaboration will ultimately lead to better outcomes for our people and our Country. Current partners can provide resources such as funding but also in-kind skills and knowledge. We would like to thank and acknowledge our past and current partners and we look forward to working with you going forward:

Organisation	Collaboration	
National Indigenous Australians Agency	Advice and funding for the management of the IPA and the Ranger project	
Our neighbouring stations and businesses; • Anna Plains Station • Wallal Station • Mandora Station • The Eighty-Mile Beach Caravan Park • Sandfire Roadhouse	Project and logistic support	
Our neighbouring Ranger groups and protected areas; • The Karajarri People, to the North • The Ngarla People, to the West • The Martu People, to the South • The Ngurrara people to the East	Project support, collaboration on landscape scaled projects such as fire and ferals, shared resources	
Yamatji Marlpa Aboriginal Corporation (YMAC)	Host organisation, providing project management and contract administration	

Organisation	Collaboration	
Indigenous Desert Alliance and the 10 Desert Project	Financial, in kind and network support for undertaking work in the desert – fire operations, feral animal control, Indigenous knowledge transfer, tourism development	
Department of Biodiversity, Conservation and Attractions (DBCA)	Joint management partner for Eighty Mile Beach Marine Park and the terrestrial reserves of Kujungurru and Walyarta areas	
Kimberley Land Council	Support with fire management and inclusion in the Kimberley Ranger Forum activities	
Rangelands NRM WA	Technical support for operational projects (e.g. ?)	
Environs Kimberley	Technical and project support for biodiversity projects in the desert	
Department of Fisheries	Technical and project support for monitoring of finfish	
Australian National 4WD Association	Support with the management of the Nyangumarta Highway Visitor Permit	
Conservation Management	Support with development of this plan	







Contents

ntroduction	1
Check-up Review and Adaptation	3
MERI – Nyangumarta Project Check-ups (Inputs and Outcomes)	5
MERI – Nyangumarta Project Check-ups (Threats and Values)	7
Table 5: Program 1 – Cultural and Natural Heritage Management	8
Table 6: Program 2 – Fire Management	10
Table 7: Program 3 – Visitor Management	10
Table 8: Program 4 – Native Plants and Animals	11
Table 9: Program 5 – Capability and Capacity Building	12
Гable 10: Program 6 – Feral Animal and Weed Management	14
Гable 11: Program 7 – Governance and Partnerships	15



Introduction

Nyangumarta Warrarn Aboriginal Corporation (NWAC) along with our partners will be looking at the effectiveness of the work that we do on our Country. Walypala in Canberra call this a MERI Plan – meaning Monitoring, Evaluation, Reporting and Improving. In basic terms this means that we say here in this Milimili what we are going to do, then we observe what happens after we have done it. We then look at what worked and what didn't, share this information and based on this, make some improvement to whatever it is we are doing to achieve a better outcome.

MERI means:

- MONITORING: collecting information and data.
- EVALUATION: looking at the monitoring data and working out what it means. Then based on this we assess whether what we did was a success, and what we could do to improve next time.
- REPORTING: telling others about what we have found out, through monitoring and evaluating; sharing information including information about what we have achieved (our successes) and how we could improve.
- **IMPROVEMENT**: using this information to do things better.

The MERI Plan will assist all Nyangumarta Traditional Owners (Native Title Holders) and our partners to understand how well our IPA Management Plan and actions are helping us achieve our vision.

Working with MERI Plans can introduce a lot of new, and sometimes confusing, language, however it is important to remember that the terms 'fit' together to tell a story. There are two parts to the story – the plan and the MERI.

The plan part, from our IPA Management Plan:

- Tells us where we are trying to go (vision), what is important to us (values) and what problems are getting in our way (threats);
- Says what we want to achieve on the way to our vision (goals) and the jobs we need to do to get there (strategies); and
- Because we know what the strategies are, we can go out and do (activities).

The MERI part starts from the strategies and activities:

- To see if our plan is working, we check-up on (measure) things that tell us what is happening (indicators);
- We look at the Activities (inputs) and strategies to see what work we get done (Outputs);
- We then see if our threats have reduced (outcomes); and
- And then see if our values are any healthier (impact).

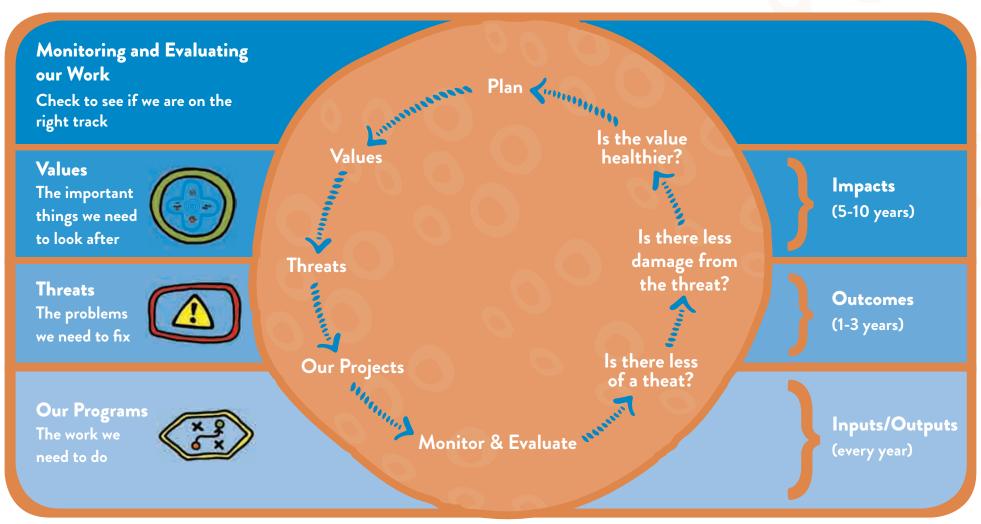


Figure 1: How the elements of our IPA Management Plan fit in with the MERI Plan.

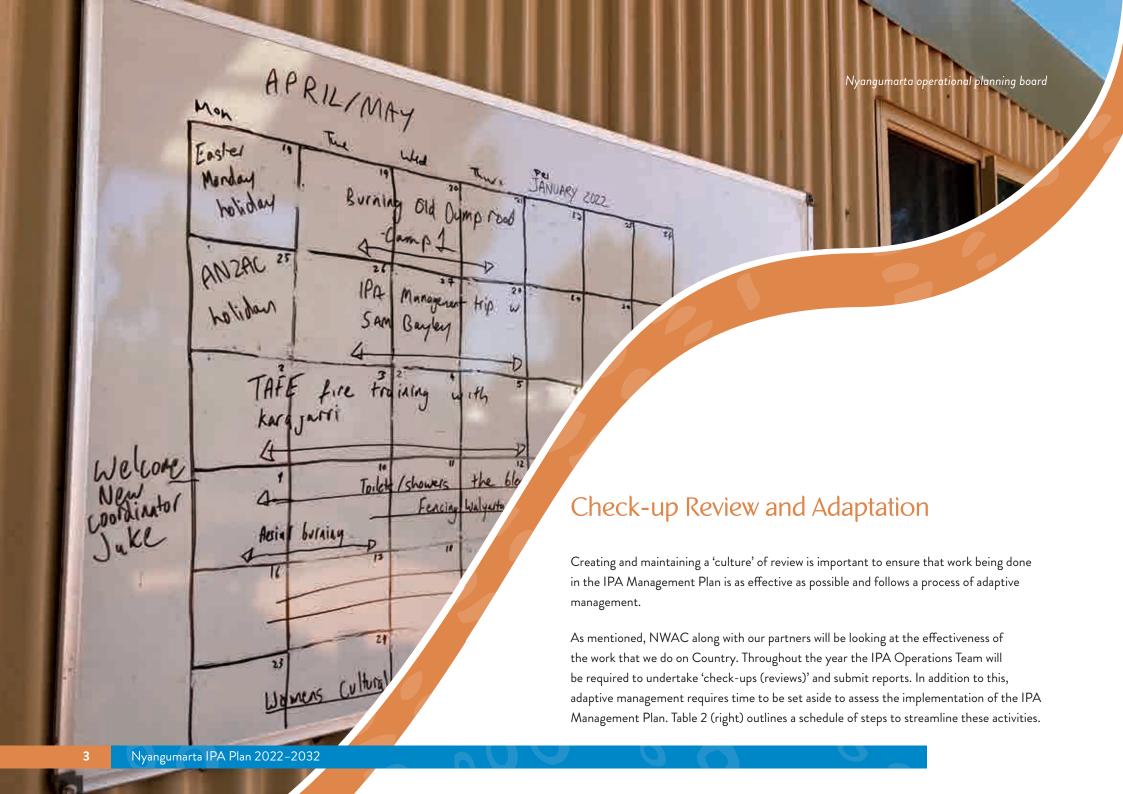


Table 2: Review and Reporting Steps to be Undertaken as Part of the IPA and MERI Plans

Reporting Period	Adaptive Management Step	Responsibility	Tools / Resources	What to do
	Undertake a check-up on the implementation of strategies in the plan	IPA Coordinator	 Nyangumarta MERI Plan – project check-up templates IPA project plan and budget 	Complete project check-up templates like the example provided (Table 4) based on work undertaken during review period
1 July – 30 December	Report to IPA Advisory Committee	IPA CoordinatorIPA Advisory Committee	Outcomes of project check-upsIPA project plan and budget	 Present results of check-ups to IPA Advisory Committee Adapt activities / work program based on IPA Advisory Committee feedback
	Complete annual performance Report to funding bodies • MERI Plan – Ct • Audited Expend		 MERI Plan – Check-up Audited Expenditure Report IPA project plan and budget 	 Update Interim Performance Report using check-up results & IPA Advisory Committee feedback Submit report to funding body
	Undertake a check-up on the implementation of strategies in the plan	IPA Coordinator	 Nyangumarta MERI Plan – Project check- up templates IPA project plan and budget 	Complete project check-up templates like the example provided (Table 4) based on work undertaken during review period
	Report to IPA Steering Committee	IPA Coordinator	Outcomes of project check-upsIPA project plan and budget	 Present results of check up to IPA Advisory Committee Adapt activities/work program based on IPA Advisory Committee feedback
1 January – 30 June	Annual review	IPA Advisory Committee	 MERI Plan Annual Review Results: MERI Plan – Project check-up results MERI Plan – Threats MERI Plan – Values IPA project plan and budget 	 Discuss check-up results and recommendations Review status of values Review status of threats Adapt IPA, Work & MERI Plans as necessary
	Complete mid-financial year Performance Report to funding bodies	IPA Coordinator	 MERI Plan Bi-annual Review Results: MERI Plan – Project check-up results MERI Plan – Threats MERI Plan – Values IPA project plan and budget 	 Complete Interim Performance Report using check-up results & IPA Advisory Committee feedback Submit report to funding body
	Project plan and budget for next financial year	IPA Coordinator	Annual Review outcomes IPA project plan and budget	 Develop new project plan and budget using results of annual review Submit to funding body



MERI - Nyangumarta Project Check-ups (Inputs and Outcomes)

The process of monitoring begins with checking the progress of projects (i.e. check-up reporting). A project is made up of strategies – the things we will do to help us reach our goals.

At least every six months, the project team will meet and check-up on the progress of the strategies set out in the plan. Progress will be assessed using the table (right) which will inform a check-up report for each strategy overall (see Table 4 for an example of how check-up reporting will be done).

Table 3: The Check-up Reporting Scale for Strategies and Activities

	Rating	Description
1	Completed	The work has been completed successfully
2	On Track	The work is going ahead according to plan
3	Planned	The work has not started yet but it is planned to happen in the future
4	Minor Issues	The work is progressing but there are small issues which need some attention
5	Major Issues	There are large issues or delays which need attention
6	Not Specified	Not assessed as we don't have enough information yet
7	Abandoned	We are not doing this work anymore

Table 4: Cultural and Natural Heritage Management – The Project Check-up Template (Example – each project will have a table)

	- 1			
		ous Period		ent Period
Strategies	Progress (Review Rating)	- Dec 2022 Notes and Status of Recommendations	Progress (Review Rating)	Notes and Recommendations for
Undertake back to Country trips with young and old people to teach Nyangumarta culture (e.g. school holiday camps).	(review reading)		(review rading)	Action
Work regularly with Bidyadanga School to incorporate Nyangumarta culture into the curriculum (e.g. Junior Ranger Program, school-based apprenticeships and/or two-way learning programs).				
Establish a safe keeping place for storing and using cultural information (Nyangumarta database).				
Develop tools and products to assist Traditional Owners in learning language and Traditional Ecological Knowledge (TEK) (e.g. Seasonal Calendars).				
Support Nyangumarta cultural practices such as ceremony and dancing to facilitate young people and <i>Mirtanya</i> and <i>Mirtawari</i> (Elder men and woman) to share knowledge and take pride in Nyangumarta culture.				
Continue to undertake cultural mapping exercises on Country to document and protect cultural sites, especially targeting rocky outcrops and groundwater dependant sites.				
Work with young and old people to record language stories and songs for all sites.				2
Continue to search for and protect graves and birthing sites on Wallal, Mandora and Anna Plains Stations.				
Develop cultural management zones and related plans for each area of Nyangumarta Country to ensure strategic resource use.			6.	



MERI - Nyangumarta Project Check-ups (Threats and Values)

In addition to undertaking a *Check-up Review* on the strategies in the plan (see previous page), we also want to check to see if the work being done by the Rangers is making a difference to Country. That is;

- Are our threats becoming less of a problem? (outcomes)
- Are our values becoming healthier? (impact)

If our work is not making a positive difference, then we may need to change the way we do things – this is adaptive management.

Using Indicators and Selecting Monitoring Methods

Sometimes we can see change quickly, but most often it is gradual and hard to notice. That is why the Rangers undertake monitoring activities. We monitor things by deciding on an important **indicator** and then decide on the best **method** to collect that information.

At the start of a program there may not be many indicators or monitoring in place. But we still want to be able to talk about how the program is progressing. Over time, the Rangers together with the IPA Advisory Committee will work to develop new indicators and monitoring activities to help capture the change in Country and to assess the effectiveness of the ranger projects. For example, linking existing monitoring data that the Rangers collect (e.g. Bilby surveys) to the Nyangumarta fire project can show if the fire

burning activities are having a positive impact on the health of *Pirra* country.

Project Check-up Tables

For each of the Nyangumarta Ranger projects, the tables on the following pages detail:

- 1. The key strategies for that project
- 2. How we will measure that strategy (using an indicator or the check-up report)
- Method to monitor
- 4. Monitoring frequency
- 5. Associated threat
- Associated value

Please note that these tables are intended to change over time as the MERI plan develops.

Table 5: Program 1 – Cultural and Natural Heritage Management

			1		
Strategy	Indicator or Check-up Report	Method to Monitor	How Often?	Threats Reduced	Main Values Improved
Undertake back to Country trips with young and old people to teach Nyangumarta culture (e.g. school holiday camps).	Number of trips on Country	Ranger program records	Annually	Lack of knowledge transfer from old people to young people, Difficulties in accessing Country	Marrngumili – Nyangumarta Law and Culture
Work regularly with Bidyadanga School to incorporate Nyangumarta culture into the	Number of children and Elders participating	Ranger program records	Annually	Lack of knowledge transfer from old people to young people	
curriculum (e.g. Junior Ranger Program, school-based apprenticeships and/or two-way learning programs).	Number of visits and activities of the IPA team, including the trainee Rangers with schools in Bidyadanga and/or Port Hedland	Ranger program records	Annually		
Establish a safe keeping place for storing and using cultural information (Nyangumarta database).	Check-up report	Ranger program records	Once	Lack of knowledge transfer from old people to young people	
Develop tools and products to assist Traditional Owners in learning language and Traditional Ecological Knowledge (TEK) (e.g. Seasonal Calendars).	Number of tools developed / Check-up reporting	Ranger program records	Annually		
Support Nyangumarta cultural practices such as law ceremony and dancing to facilitate the transfer of knowledge from Mirtanya and Mirtawari (Elder men and women) to younger people.	Elder satisfaction	Satisfaction survey	Annually		

Table 5: Program 1 – Cultural and Natural Heritage Management (Continued)

Strategy	Indicator or Check-up Report	Method to Monitor	How Often?	Threats Reduced	Main Values Improved
Continue to undertake cultural mapping exercises in <i>Pirra</i> Country to document and protect cultural sites, especially targeting rocky outcrops and groundwater dependant sites.	Number of rocky outcrops' surveyed	Cultural site mapping project	Once	Wrong way visitation, Lack of access to good water	Yinta – Important Sites
Work with young and old people to record, language stories and songs for all sites.	The number of stories, songs and sites recorded and documented	Satisfaction survey database	Annually	Lack of knowledge transfer from old people to young people	Marrngumili – Nyangumarta Law and Culture, Yinta – Important Sites
Continue to search for and protect graves and birthing sites on Wallal, Mandora and Anna Plains Stations.	Number of sites found	Cultural site mapping project	Once yearly for first 3 years	Lack of knowledge transfer from old people to young people, Wrong way visitation	Yinta – Important Sites
Develop cultural management zones and protection plans for the Nyangumarta IPA to ensure strategic management and resource use.	Cultural protection plan(s), # of sites visited and protected per year	Ranger program records	As needed	Wrong way visitation	Marrngumili – Nyangumarta Law and Culture, Yinta – Important Sites

 Table 6: Program 2 – Fire Management

Strategy	Indicator or Check-up Report	Method to Monitor	How Often?	Threats Reduced	Main Values Improved
Develop a 5-year fire management operational plan to guide annual fire burning and to build operational capacity.	Abundance and distribution of threatened species,	Trapping Lines (TBD), Fire Metrics via NAFI	Annually	Summer wildfires 'too hot',	Pirra Country, Marrngumili –
• • •	Changed Fire Regimes	FIRE METRICS VIA NAFI		Lack of knowledge transfer from old people to young	Nyangumarta Law and Culture
Develop and implement annual fire management plan working cooperatively with partners (Nyangumarta Elders, Researchers, DBCA, KLC fire specialists).	Check-up report , Number of partners that participate	Ranger program records	Annually	people to young people, Difficulties in accessing Country	

 Table 7: Program 3 – Visitor Management

Strategy	Indicator or Check-up Report	Method to Monitor	How Often?	Threats Reduced	Main Values Improved
Build and maintain infrastructure such as bow shelters, tables/decking, signage, and access tracks at key points to assist in site access for Traditional Owners and visitors (e.g. Saunders Springs).	Check-up report	k-up report Ranger program records Annually	Annually	Wrong way visitation	Pirra Country, Jurrar Country, Yinta – Important Sites
Continue to manage and develop the Nyangumarta Highway permit system and associated infrastructure to build cultural awareness and safety (e.g. interpretive signage) of Nyangumarta Country and raise revenue.	Percentage of visitors with the right permit	Random vehicle checks, Report through the permit system	Ongoing, 6-monthly		
Identify, map and put-up signs for no go areas to ensure safety of everyone.	Check-up report	Ranger program records	Once		



Table 8: Program 4 – Native Plants and Animals

Strategy	Indicator or Check-up Report	Method to Monitor	How Often?	Threats Reduced	Main Values Improved
Continue to work with partners to build knowledge of threatened species and ecological communities over time in <i>Pirra</i> Country, to ascertain health of Country and impact	Abundance and distribution of threatened species	2ha plot surveys, Track-based monitoring	6-monthly	Inappropriate mining and development	Pirra Country, Jurrar Country
of management regime (e.g. long-term biodiversity sites). In partnership with Parks and Wildlife	Abundance and distribution of	Track monitoring ,	Annually/Breeding		
undertake flatback turtle and wader bird monitoring and other activities as directed as part of joint management arrangements.	turtles and wader birds	Nest exhumation	season		
Working with Department of Fisheries develop a finfish monitoring program to help inform management of critical finfish, rays and shark populations.	Check-up report		Annually (intially)		

Table 9: Program 5 – Capability and Capacity Building

Strategy	Indicator or Check-up Report	Method to Monitor	How Often?	Threats Reduced	Main Values Improved
Work with partners to develop specialised skills pathways for career and personal development for current and emerging Rangers (e.g. School based trainee programs).	Check-up report		Annually		Nyangumarta People and Pathways
Ensure active engagement of all Nyangumarta families (Elders and youth) in the population hubs of Broome, Port Hedland and Bidyadanga.	Number of Nyangumarta families involved	Event attendance records	Annually	Not enough opportunities for passing on knowledge from old people to young people	
Develop a Nyangumarta succession and leadership program to support young people into more senior and specialised roles.	Number of people who have progressed into senior roles	Human Resources management records	Annually		Nyangumarta People and Pathways, Governance and Partnerships
Develop a Junior Ranger Program including school-based trainees to engage young people in Ranger work. Focus should be both youth at risk and reward for hard working/ attendee students.	Number of young people involved in Junior Ranger Program	Ranger program records	Annually		Nyangumarta People and Pathways
Support the increased engagement and development of women Rangers and provide a safe cultural space for female Rangers and Elders.	Number of women Rangers	Ranger program records	Annually		
Explore micro enterprise projects such as native seed harvesting, plant propagation and bush medicines.	Number of projects set up, The numbers of plants propagated, Income from sales	NWAC records	Annually		Nyangumarta People and Pathways, Governance and Partnerships

 Table 9: Program 5 - Capability and Capacity Building (Continued)

Strategy	Indicator or Check-up Report	Method to Monitor	How Often?	Threats Reduced	Main Values Improved
Continue to develop Nyiyamarri Pukurl (80MB) as a seasonal ranger base, increasing accessibility to the Program and Country for Nyangumarta living outside of Bidyadanga.	Check-up report		Once	Difficulties in accessing country	Nyangumarta People and Pathways
Undertake and host regular exchange opportunities with other Ranger groups and attend conferences to enable Nyangumarta to be inspired and see different ways of doing things.	Check-up report		Annually	Not enough opportunities for passing on knowledge from old people to young people	Nyangumarta People and Pathways, Governance and Partnerships
Build capacity of Rangers to partake in cultural tourism activities at 80 Mile Beach by undertaking tourism training and establishing a simple tourism strategy.	Number of Rangers who participated in tourism training, Tourism strategy established	Ranger program records	Annually		
Continue to contribute and attend regional forums on saltwater management such as the Indigenous Saltwater Advisory Group.	Check-up report		Annually	Not enough opportunities for passing on knowledge from old people to young people	Nyangumarta People and Pathways, Governance and Partnerships, Jurrar Country
Provide regular updates to the Nyangumarta Community and NWAC Board through YMAC regular ranger newsletters.	Check-up report	Ranger program records	Annually		Governance and Partnerships

Table 10: Program 6 – Feral Animal and Weed Management

Strategy	Indicator or Check-up Report	Method to Monitor	How Often?	Threats Reduced	Main Values Improved
Continue to work with partners (e.g. Parks and Wildlife and the 10 Deserts Project) for the management of camels and cattle.	Number of camels and cattle removed	Activity reports	Annually	Feral camels damaging springs	Pirra Country, Yinta – Important Sites
Continue to work with Parks and Wildlife to install/maintain cattle-proof fencing around Walyarta Conservation Park.	Number of camels and cattle removed	Activity reports	Annually	Feral camels/cattle damaging springs	Pirra Country, Yinta – Important Sites
Continue to monitor for and develop a feral cat eradication program for Nyangumarta Country.	Check-up report Number of cat sightings/ trappings	Activity reports	Annually	Feral cats	Jurrar Country
Monitor and eradicate weeds at key locations (e.g., water points).	Weed distribution at key locations	Aerial imaging, GPS data	Ongoing	Weeds	Pirra Country
Together with partners plan for cane toad management strategy to assist in the minimisation of their spread and impact on Nyangumarta values.	Check-up report		Ongoing	Cane toads	Pirra Country, Jurrar Country



Table 11: Program 7 – Governance and Partnerships

Strategy	Indicator or Check-up Report	Method to Monitor	How Often?	Threats Reduced	Main Values Improved
Identify research and operational needs and work with partners (e.g. researchers) and funding providers (e.g. grant makers) to ensure that the IPA Management Plan can be implemented.	Check-up report, Number of active partnerships Annually			Not enough opportunities for passing on knowledge from old people to young people	Governance and Partnerships, Nyangumarta People and Pathways
Together with Rangers and partners (e.g. IPA Advisory Group) undertake annual monitoring, evaluation, and reporting (including to the community) of the IPA implementation to ensure adaptive management takes place.	Check-up report	MERI Framework	Annually		





























The many facets of ranger work on Nyangumarta Country

