

# Ganalanga-Mindibirrina Indigenous Protected Area

## Plan of Management 2015-2020



National Environmental  
Research Program

NORTHERN AUSTRALIA HUB



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Front cover image: From left, Terrance George, Carl Daylight and Jack Green.

*"this old Falcon is one of two cars that my father drove out here in the 70's, when they heard about land rights. Those old people, they came back to their country to set up and live here again. The road finished way back so they made a track, by hand with an axe, pushed the cars along till they came to Nudjabarra. In the end they won their country back, and the Falcon, it's still here!"*

*Terrance George*



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*Note: A Biodiversity Map for the IPA accompanies this plan, available on request from the Northern Land Council.*

## Waanyi and Garawa Voices



*"That country was given back to our old people.... it was very important to them. That's why we want to keep it very strong. We set up our rangers to get our kids back out on country...out of town, out of trouble. Burning, how to care for their country, names for all our sacred sites...they won't get that experience in town, they'll get it out there. We gotta get our young people back out on homelands. That's where proper knowledge come from."*

Jack Green



*"I got some young people; we gotta get them out on country. They'll do some work, learn from the rangers. We gotta get those cattle behind wire. We got some good brumby too, quiet ones, we gotta break some young horses. Don't know what we'll do with the old ones, wild ones, maybe shoot them? Pigs too. Really good country out there, we gotta work on that. "*

Jack Hogan



*"We are the land! I'm out every weekend; make a fire to cook, no generator, no bore or pump, lucky we got some rain in our tank! Hard to get to Fish River (outstation) if the creeks up but sometimes we go for two weeks or more, with little kids. We use candles, we don't have a good motorcar..., but I love going out bush, I love going hunting and fishing. The kids love it too. I lived there before the land claim, grew up my sister and her four babies there. We taught them their law – and how to cook! I just took my great granddaughter out to Fish River, watched her crawling in the sand!"*

Estelle George



*"Being a Ranger is about seeing where your ancestors were born; a tree or a cave, a memorial to our old people. Also, hunting, fishing, caring for our country; being a ranger is like looking after your back yard! Sometimes there's a site you might of heard about from your parents; we can fly over, find it from the air – then maybe walk in. Looking after sites we only heard about!"*

Donald Shadforth



*"Collecting bush foods and fishing, that's what I love about my country. I grew up at Siegal Creek. I take my kids out and my nephews' kids and other children to Siegal. But we can't live out there 'cause there's no water, or power".*

*Geraldine Johnny*



*"Going out bush; fishing, turtle, bush food, taking children out, footwalking', and teaching them. Without title to our land we'd grow up whiteman's way, drinking, mucking up, going to jail. Kids see that and do the same. You lose yourself not knowing who you is, lost in a whiteman's world."*

*Mark Banjo*



*"I'm from Dry Creek; my house there was built by my husband. It's my home, there's no way I could leave that place! My husband fought for this land, we lived there before the land claim. Being on the land is a better place for our children. Taking kids out is important; teaching them how to live off the land, hunting, fishing, bush tucker – it all very important for us."*

*Noreen George*



*"Working together you earn respect. What I learnt from my grandma and my grandfather was self-respect. They walked long way, past relatives hanging in trees, like dogs – but they kept on goin'; they kept their respect. We need respect from other agencies for IPA and our work – that will help 'close the gap'. Getting back on country will help 'close the gap'."*

*Eugene Escott*



# Our Vision for our Country

**To live on the Waanyi/Garawa Aboriginal Land Trust**

**All land owners working together to care for our country and culture**

**Using two knowledge systems (Indigenous and scientific) to manage and protect our country**

**To develop enterprises on country to create work for our people**

**To leave our country well cared for and healthy, for our children and grandchildren**

**Sustainable land-based enterprises like a tourism business focused on China Wall, and a viable cattle business.**



## Waanyi and Garawa Country

The ancestral country of the Garawa people stretches from near the Wearyan River in the Northern Territory, east to the Settlement Creek area. It includes the Robinson and Calvert River catchments.

The ancestral country of the Waanyi people lies to the south of Garawa country, between the Nicholson and Gregory Rivers. Major features of Waanyi and Garawa lands are the long, snaking escarpments like 'China Wall' and the broad basin of the Nicholson River (Ganalanga) tipping north east towards the Gulf of Carpentaria. Both Waanyi and Garawa Country are cut by the Northern Territory/Queensland border.

We have Land Rights over only part of our ancestral country. Both the Garawa and Waanyi/Garawa Aboriginal Land Trusts lie in the Northern Territory. They were granted to us as Aboriginal Freehold under the *Commonwealth Aboriginal Land Rights (Northern Territory) Act* (ALRA) 1976.

Across the border in Queensland, a successful Native Title determination gives formal recognition to Waanyi people's customary rights under Australian law. Though not part of our IPA, we intend to exercise our rights to access our ancestral lands and carry out customary obligations including hunting, fishing, harvesting bush foods and caring for our sacred sites.

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## Waanyi and Garawa Native Title Lands in Queensland

*The Waanyi Native Title area is the largest determination (December 2010) of native title in Queensland. It covers more than one and a half million hectares and takes in Boodjamulla (Lawn Hill) National Park, several large pastoral holdings and the Bidunggu Aboriginal Community on the Gregory River.*

*Garawa Native Title, covering some half a million hectares of land and waters in the central Gulf coast, was recognised in a joint determination with the Gangalidda people in June 2010. It extends over Brokera, Bundella, Cliffdale, Escott, Tarrant and part of Troutbeck pastoral leases in north-west Queensland, as well as the Gurridi Traditional Land Trust.*

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# Ganalanga-Mindibirrina IPA

## Location

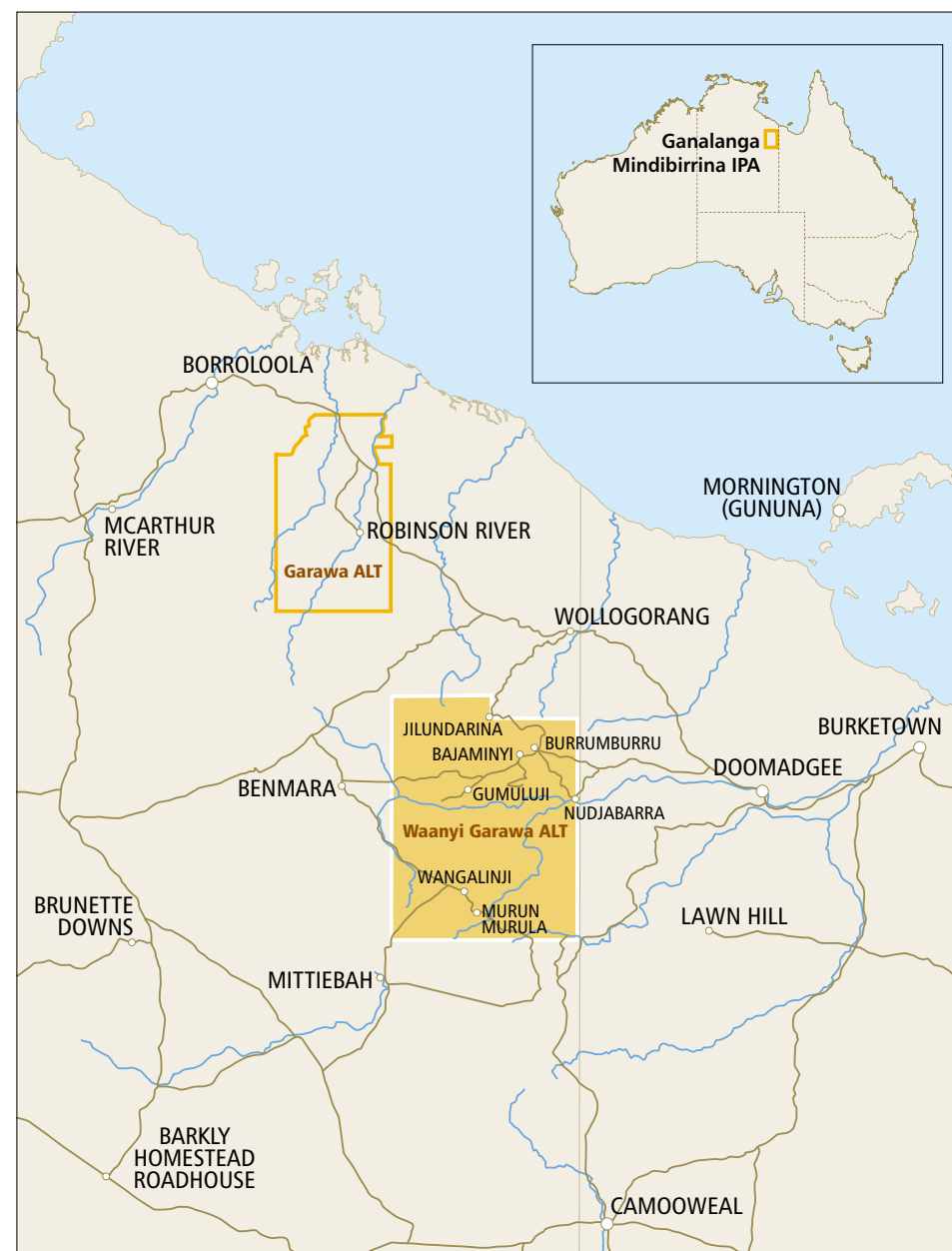
The Ganalanga-Mindibirrina Indigenous Protected Area covers the entire Waanyi/Garawa Aboriginal Land Trust, an area of some 11,000 square kilometres in the southern Gulf of the Northern Territory, Australia.

## Declaration

The Ganalanga-Mindibirrina Indigenous Protected Area is declared as a Category VI Managed Resource Protected Area, consistent with the International Union of the Conservation of Nature (IUCN) definition of an “area containing predominantly unmodified natural systems, managed to ensure long-term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs”.

## Description

The Waanyi Garawa Aboriginal Land Trust is an ancient landscape, a deeply weathered geology overlain by thin sandy soils or simply exposed rocky pavement. The vegetation is mostly low and sparse. A simplified map of land types within the IPA is provided as the background to the accompanying biodiversity map.





Ironstone (laterite) plains or pediments are another common feature of our country. In these places soils are deeper but still sandy loams, supporting only spinifex. Bloodwood and stringybark grow in these areas, and where the pediments break away lancewood forms dense fringing thickets. Below the ranges low rolling rises skirt the Nicholson Basin. Soils here are deeper and less uniform. Accordingly, they support a greater diversity of woodland habitats. On well drained soils a typical plant community here is a Darwin box and ironwood open-woodland. On heavier soils, low open woodlands of snappy-gum or silver-leaved box predominate.

Lower in the catchment, grasslands on cracking-clay plains cover large areas, as well as mixed low woodlands, including those dominated by paperbarks and wattles. Floodouts and seasonal wetlands support low, open woodlands of coolibah and baubinia. Minor habitats include monsoon vine-thickets in the folds and gorges of the ranges and riparian woodlands of red gum, paperbark, northern swamp box and pandanus along the creek lines and course of the Nicholson River.



*The escarpment known as China Wall is the dominant feature of the Waanyi Garawa Land Trust. It is the highest range in the Northern Territory.*

*Artwork, China Wall by Stewart Hoosan.*



## Our History

Our history in the southern Gulf is extremely long. It begins in *Wanggala*, or the “Dream Time”, when ancestor beings created, organised and controlled our social, physical and cultural world. Law was strong then and people lived as they should; they stayed on their country and took great care over their responsibilities of ceremony, sites and kin. Laws, practices and beliefs set down during *Wanggala* are still with us today, they are the foundations of our culture. *Wabulinji* means ‘long time ago’ and refers to the period of our history before, and just after, whitefellas arrived. These days we sometimes call it the “Wild Time”, when our ancestors were still living on and managing their country. The end of this period is when our history becomes dark, when whitefellas came and with their cattle, their law and their police, and began taking away our land and our livelihoods.

Archaeological records indicate that Aboriginal people have lived in the southern Gulf of Carpentaria for at least 30,000 years. Garawa and Waanyi people are closely related. As neighbours we share similar languages, customary systems of land ownership and have intertwining kinship and ceremonial relationships.

Our lives once centred on the rich river corridors and flood plains where food and water were most plentiful. We moved often, from site to site, so as to make the best use of our country. We followed the rhythm of the land, travelling out onto the lowland plains and low hills during the cooler months when water and wildlife were plentiful. In the best years, or when special foods or medicine were needed, we ventured even further, hunting in the grasslands for emu and red kangaroo or camping at distant wetlands filled with water and waterbirds after big rains.

We made and used paperbark dwellings, wells, nets for catching fish and game, large stone fish-traps and weirs in rivers and estuaries, several types of hunting spear, coolamons, boomerangs, waddies, dilly-bags, water containers, spindles for spinning possum wool and a highly refined stone tool kit including flints, knives, axes, adzes and other utensils. Early Europeans marvelled at the variety of our traditional diet which included honey, roasted bandicoot, kangaroo (*mailadyi*), turtle (*wabungara*), possum, goanna (*dyambapna*) and crocodile meat, fish (*wirigatyigaty*), shellfish (*mulla mulla*), prawns, several types of ground yam, pandanus nuts, palm hearts (*wodidy*), and bread prepared from the normally poisonous seeds of cycad. They also noted our extensive use of fire for managing country.

Amongst our neighbours, our ancestors were respected for their skills in making stone spear-heads and knives which they traded over vast areas for other precious items such as pearl shells. Our spears and boomerangs were engraved with a signature pattern known as *jinnanggliyari*, which like our languages marked our strong cultural identity. Our tool kit was broader than that of our coastal neighbours. Although, we shared important technologies such as sewn paperbark canoes, woven fish-nets and fishing hooks, we had several unique tools including specialised spears and spear-throwers.



## Cultural Values of our Country

Our country is Waanyi and Garawa culture. Smoke-stained caves and painted overhangs, middens, quarries, burial sites and many sacred places mark this as a Waanyi and Garawa landscape.

We hold deep spiritual knowledge of our land and the ceremony, songs and dreamings that bind us to it. Many ancestral beings still live in our country. Their signs are in the waterholes, outcrops or other features in the landscape. Their powers are still here too; they may be gentle or dangerous powers.

*Bujimala* (rainbow snake), *Birinya* (water rat)  
*Balaga* (flying fox), *Bardagalinya* (red kangaroo),  
*Galwarwana* (topknot pigeon) *Lirradu* (black cockatoo)  
*Dirindiri* (water beetle), *Mungi* (tree sugarbag),  
*Marrarrabana* (mermaid), *Julujulu* (nightbird),  
*Wanbarinya* (black bream) and *Warrgi* (dingo) are just some of the dreamings from our country.



Sites such as this one known as Dingo Dreaming occur throughout the IPA. They are often associated with ancestral beings that shaped and brought life to the landscape of the south-west Gulf.





# Natural Values of our Country

## *“Kunyinbar yari Kunyinbar murkur”*

*“Healthy country, healthy people”* – our land is our life and our livelihoods.

Our country’s values are richer and more exceptional because they are a legacy of our culture. Within the Ganalanga-Mindibirrina IPA there are many different types of country, or habitats. These range from humid monsoon forests to dry spinifex grasslands.

The Ganalanga-Mindibirrina IPA takes in most of the Nicholson Basin. The Nicholson River runs year-round, fed by numerous springs and soaks from the surrounding uplands. In the south west there are wide open grasslands. These are the most northerly parts of the Barkly Tablelands, and virtually the only areas of black soil not being used for intensified grazing.

A long and rugged escapement known as China Wall divides our Land Trust north and south. China Wall is one of the highest areas in the Northern Territory and it is also one of the oldest landscapes in Australia. This area is not only spectacular to look at, but like the other large rocky ranges of northern Australia it is home to a wide variety of wildlife including species that occur nowhere else.

Eleven (11) **threatened species** have been found on or next to our Land Trust. These are the Carpentarian grass-wren, Gouldian finch, red goshawk, yellow spotted monitor, Merten’s water monitor, Gulf snapping turtle, Australian Bustard, Emu, Carpentarian Rock-rat, Northern Quoll and Carpentarian Antechinus.

**For more information on Threatened Species see Appendix 3.**





## Threats to our Country

The main threats to our country are discussed in the following pages. We talk about each problem, how we'll deal it, and what outcome we are looking for. Also, we share some ideas about how we'll review our management and get better at it over time.



*Ranger Coordinator, Jimmy Morrison, checks out an area badly damaged by feral pigs.*

## Wildfire

Widespread, sometimes catastrophic fires have ravaged the Waanyi/Garawa Aboriginal Land Trust and surrounding area since we were forced off our land. The fires kill wildlife and stock, they damage outstation fences and bores, generally laying waste to the land. As responsible land owners we want to control fire by managing fuel loads and maintaining fire breaks.

Uncontrolled fire affects the health of our country; degrading its richness, leaving behind only dusty soils, the hardiest plants and the toughest of animals. Many native animals may have gone from our country, pushed out as hot fires have damaged their food and shelter. In particular, fire is a threat to wetland habitats like springs, soaks and billabongs. In the past these were highly valued places and protected by our ancestors. Unfortunately, many of these areas are now badly affected by fire. Feral animals make this problem worse by trampling, grazing and opening up these patches to grasses and in turn, more fire. This cycle can eventually reduce these once special places to open, salty bogs with little hope of recovery.

The fifteen year fire history for the southern Gulf shows that large areas were burnt in all years except in 2003, 2005 and 2008. Very large areas were burnt in 2001, 2004 and 2012, as a result of preceding wetter years which generated high fuel loads.

Drier woodland and grassland communities also suffer from too much fire. Too much fire has slowly stripped fruiting shrubs like white, red and black currants from our country. These are important plants for birds and native mammals; they are also valued traditional foods. Although old growth spinifex provides key habitat for a number of animals, very little exists within the Land Trust. The endangered Carpentarian grass-wren needs spinifex four or more years old for its feeding and breeding. Similarly, Hosmer's skink and rock wallabies rely on areas of old, dense spinifex for protection against predators.

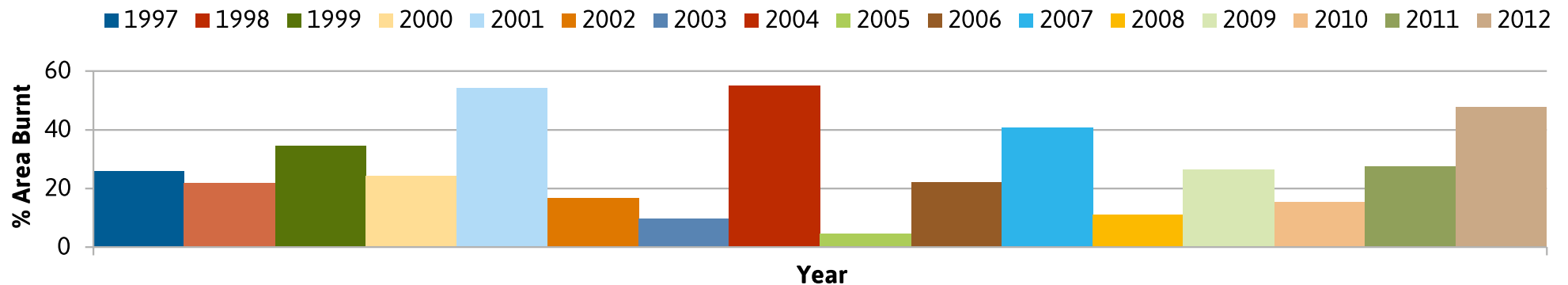


Figure 1: Percentage of the southern Gulf (Gulf Fall & uplands Bioregion) burnt each year since 1997.



## Feral Animals

Wild cattle and feral horses are widespread across our Land Trust. Feral pigs are found in all of the wetter areas, along the rivers and in the wetlands, like Wangalinji and Jumbarrda. Luckily, there aren't too many feral buffalo. We only see them now and then, north of Siegel Creek. Lots of branded cattle come across from neighbouring cattle stations. They move onto the Land Trust in the wet season, and their owners come and muster them when the country dries out. No one asks our permission for this.

Feral horses, cattle and pigs are damaging our country. The Nicholson Basin is a seasonally dry landscape, mostly open plains and low rolling hills. The springs and soaks, creeks and rivers bring life to our land but unfortunately these places are where feral animals do the most damage. Many of our wetlands and waterways are now badly damaged. The bush is over-grazed and the water is polluted with dung or dead animals. Our rich river soils have been eroded by trampling and pig rooting. If we allow this to continue we'll lose many plants and animals from our lands.

A strong example of the impact of feral pests in combination with other threats such as fire, is that nearby Queensland river red-gum woodlands, once common along the along waterways of the Gulf, are now a declared Threatened Community.





### Other Non-native Wildlife

Scientists think feral cats are probably the main cause behind the disappearance of small to medium mammals across northern Australia over the past 20 years. Cats are smart and stealthy hunters. They are found everywhere on our Land Trust. They will kill and eat any animal smaller than themselves. We even see them eating kangaroos killed along our roads. Like cane toads, there is no good way to control feral cat numbers. But we know that fire and grazing takes away grasses, shrubs, logs and litter that native animals hide in, making it easier for cats to hunt them. So keeping plenty of ground-cover by keeping fire and feral animals out of some areas is the best way of protecting native wildlife from cats.



*From 1990 the arrival of cane toads in the southern Gulf marked the demise of many native animals.*



## Weeds

Soils disturbed by pigs, horses, or donkeys quickly get infested by weeds. Seeds from many weeds are spread by these large grazing animals, either in their fur or in their dung. So things can get out of control fast, and over large areas.

We are lucky as our Land Trust is still fairly free of weeds. We'd like to keep it that way. Our land sits at the headwaters of the rivers passing through it, so we don't get weeds coming down from up stream. Weeds do come in on vehicles through mustering, tourism, road works, mining and exploration activities. Weed invasion is hard to stop. Invasion by grassy weeds is probably unavoidable. We've seen grader grass here once. It's a weed that quickly infests savanna woodlands, out-competing native grasses and fueling hot fires. Several **Weeds of National Significance** threaten the southwest Gulf. Regular monitoring across our IPA will help guard against outbreaks of rubber vine, mesquite and prickly acacia. We also need to continue controlling infestations of calatropé (rubber bush), parkinsonia and bellyache bush already on our land.

**More details about weeds are included at Appendices 2 and 3.**



*Introduction of grader grass threatens the IPA. Looking much like Kangaroo grass, this non-native species quickly infests savanna woodlands where it out-competes native plants and increases fire fuel loads.*



# Threats to our Culture

## Loss of Culture

Not being able to live permanently on our land is one of the biggest problems we face. Without people on country the land gets sick and our longstanding knowledge of how to care for it fades. Separation from country affects our lives in many ways: ceremonies are going down, children are growing up not knowing their country, or their place in the world, people are forgetting the old ways and the right way of living.

There is now a generation of young people that have never lived on country and some who know little about its songs, stories, sacred sites or how to hunt, live from and care for the land.

## Loss of support for Outstations

A big factor in not being able to live permanently on the land is the decline in service delivery to our outstations. There are seven established outstations on our Land Trust; Jilundarina (Siegel Creek), Burrumburru (Dry Creek), Bajaminyi (Fish River), Nudjabarra, Gumuluji (Wallace Creek), Wangalinji and Murun Murula. Although most are not permanently inhabited all serve as important staging posts for customary practices such as hunting, fishing, gathering, burning, ceremony, storytelling and song. Importantly, for many families these facilities offer vital respite from the stress of town life.

Originally each community had housing, a power generator, bore, water pump, airstrip, and in some cases a school and a store. In the mid-1990's government services to our stores and schools were withdrawn and we had no choice but to move from our homes and off our land. Now our outstations are in poor shape. They are still very important to us and play a big role in our land management and ranger work.



*Jack Hogan at Murun Murula. Outstations have fallen into disrepair due to lapsed agency support.*

### The Northern Territory Queensland Border

Although Waanyi and Garawa people live within one nation (Australia) we experience problems as 'border people', whose ancestral country is divided by state and territory boundaries. Worse still, our Land Trust lies in the Northern Territory while many of us live in Queensland. Those of us who are Queensland residents can't vote in Northern Territory elections and so have no voice to influence the NT Government policy affecting our land and outstations.

### Trespass

Unwanted visitors regularly access the Waanyi Garawa Aboriginal Land Trust. Four wheel drive tourism is popular in the Gulf. These tourists are looking for remote and unpopulated areas and our country seems an ideal place to get off the beaten track away from the rules and regulations of nearby national parks, such as Lawn Hill. Mostly these visitors have little understanding of, or regard for, our culture or our land ownership. Sometimes they can be irresponsible or even disrespectful. We have noticed graffiti at art sites, artefacts missing (including skeletal remains), fires lit and outstation equipment smashed or stolen.

### Outside interests in our land

Some people see our country as land abandoned or disused, available for their benefit and exploitation. It is frustrating that support for these outside interests often takes precedence over our development ambitions. It is obvious to us that outside interests lack connections to or understanding of our land. They have little if any interest in its future or well-being beyond the life of their enterprises.

The painting by Jack Green on the following page illustrates our frustration.



*A sign of the past: Waanyi Garawa Land Trust once supported a thriving community of outstations*





*"This painting is of Redbank mine, a small copper mine on Garawa country, out towards Wollogorang Station. The storage pond at the mine is leaking into a feeder creek flowing into Settlement Creek.*

*In the centre of the painting is the mine site. You can see the pollution coming out of the mine into the feeder creek on the left-hand side of the painting and flowing into Settlement Creek. The copper makes the creek go a bluey-green colour.*

*On the left-hand side and at the bottom of the mine site are figures. These represent Garawa women and kids. On the right-hand side are four figures holding spears and boomerangs. These men are worried about a sacred site, a burial place, near the mine. There are bones that have been stored there. We can't go near the burial site unless we have permission from the mine.*

*The sun is going down and the sky is black. The blackness represents the way we feel about what's happening to our country. It's gettin' sick and we are really worried."*

*Jack Green*



Artwork Jack Green - Redbank Mine 2012



## Our Plan

Our plan shows how we will manage and protect our country for now and for future Waanyi and Garawa generations.

Our plan is for everyone. It is for traditional owners and managers, for our rangers and for our supporters and partner organisations. Waanyi Garawa Rangers will work to this plan and outsiders will understand our ideas through it. Importantly, the government will see our vision for our country and our future in it.

Over 100 Waanyi and Garawa people helped with this plan, men and women, young and old. Much of our planning happened on country. Meetings were also held in Doomadgee and Borroloola. Our planning was supported by staff from the Centre for Aboriginal Economic Policy Research at the Australian National University, the Northern Land Council, Desert Wildlife Services, Tamarind Planning Consultants and scientists from the Darwin Centre for Bushfire Research.



*Senior Cultural Advisor to the Waanyi Garawa Rangers, Jack Green works on a ground map of the proposed IPA during planning*



# Waanyi and Garawa Management Targets

**Targets** are where our values lie and where our IPA work will be done. Our plan covers eight main targets.

**Goals** are the outcomes our community are aiming for. Goals in each of the Target Areas will overlap so that improvements in one area will bring progress in another. For instance, better fire management will benefit wildlife, improve water quality and help protect our bush-foods. It could also count towards our carbon farming business.

**Actions** are the things we will do to reach our goals. In most cases these actions will become part of the Waanyi Garawa Rangers' work program.

**Indicators** are the things we'll be watching for; clear signs that we are reaching our goals, or indications that we need to do things differently. These are found in our accompanying plan for Monitoring, Evaluation, Reporting and Improvement. This is how our Plan of Management will work. It aims our efforts and resources at the areas we think are important and where we can make a difference.





**1. Culture and Community**

*Maintaining our connections to country and keeping our culture alive*

**2. Wildlife**

*Keeping our plant and animal communities healthy and plentiful*

**3. Fire**

*Controlling and using fire on our land*

**4. China Wall Country – Mindibirrina**

*Managing the rocky uplands and the special places they hold*

**5. Plains Country – Wangalinji**

*Sustaining the productive grasslands of the Wangalinji area*

**6. Freshwater**

*Looking after our wetlands and waterways*

**7. Rangers**

*Supporting our Ranger group to grow and stay strong into the future*

**8. Governance**

*Building governance for better land management*







## 1. Culture and Community

*"Our culture comes from our land, and when we're staying on country our culture is strong"*

Estelle George

On country we can bring our children up the proper way, free and safe. We can teach them our traditions; show them bush foods, take them hunting and fishing. Out bush we are free to hold ceremonies and look after our sacred sites, free to be with our families, and free to speak our language. We want to live on our country. Staying on Country is vital to our futures but for many reasons this is difficult, so we are also thinking of other ways to keep our connections to our land strong.

Our rangers and our IPA are big steps in this direction. These initiatives have provided our community regular access to country through participation in caring for country projects. They have also given us the opportunity to make a plan about how we want to manage our country. However, there remains a need to set up projects aimed at getting our children and our elders regularly out on country; to keep traditions and language alive, ecological knowledge and skills maintained and passed-on to future generations.

### Community Development

Staying on country isn't just about living on our homelands. It is also about making a living on our land. Our IPA is a solid base from which other important community projects will grow.



*Michael Barclay from Nadjabarra is keen to see cattle from the Land Trust used in a profitable and sustainable way.*

### Cattle business

Some traditional owners see cattle as a useful resource that could provide income and activity on their Land Trust. Many of us have worked on stations and have good skills in this area. We understand that grazing isn't conservation management but cattle provide meat and income. Some areas of the IPA may be turned over to grazing in the future. The benefit to the IPA will be that wild cattle will be mustered to set up our 'killer' herds. We also plan to stop neighbouring stations grazing on our land by repairing our western and south western boundary fences and fencing off some of our wetlands. Some land owners are also considering mustering feral horses for sale.

### Eco-Tourism

We have been thinking about small eco-tourism businesses in our IPA. Guided self-drive tours of the IPA, tourist camping grounds, cultural walks and talks are some of our ideas. Our rangers could support these businesses. They could help to look after camping grounds, patrol the tracks and be a contact point for visitors. Having the rangers around would make travelling through our IPA safer, and help protect our cultural sites from trespassers. Good roads and tracks on the Land Trust are important for economic development, as well as for land management. This is another area where our IPA and our economic development targets will match up.



*Some traditional owners see cattle as a useful resource that could provide income and activity on their land trust.*





## Goals

**Living on Country**

**Teaching our children culture and language**

**Holding ceremonies**

**Jobs on country for Waanyi and Garawa people**

**Waanyi and Garawa owned businesses, based on our culture, our land, and its resources**

## Actions

### **1. Maintain outstations**

- a. Confirm service agency responsibility for each outstation and submit request for annual maintenance
- b. Monitor and protect outstation infrastructure; undertake annual protection burning, weed and termite control, perimeter fencing, roof, window and door repairs
- c. Maintain bores; prioritise on basis of cost, water quality and locational need
- d. Maintain minimum necessary road/track network; prioritise on basis of cost, annual condition assessment and funding availability
- e. Establish and maintain telecommunications facilities at key outstations

### **2. Establish School Cultural projects and Traditional Ecological Knowledge projects on the Land Trust**

- a. Develop or support existing cultural awareness programs in Doomadgee and Borroloola schools
- b. As an IPA project, seek collaboration with a Linguist, establish and support a Language and Ethno-ecology project linked to the Land Trust
- c. Rangers to support annual "Country Visits" for the Waanyi Garawa community

### **3. Support for Ceremony**

- d. Establish Ceremonial Support as a priority under the IPA and within the Rangers' work schedule

### **4. Support for local enterprises**

- a. Rangers and IPA to support their community living and working on country; help with mustering, fencing and feral animal control
- b. Always seek to undertake IPA activities and infrastructure development in ways that will support or enhance community enterprise initiatives

## 2. Wildlife

We expect our country to be rich in wildlife as our old people knew it, full of the plants and animals that have been with us since Wanggala. But things are changing; today our wildlife is threatened by animals and plants from elsewhere, by wildfire and by climate change.

These are all hard threats to manage, harder still when what we know about our wildlife is fading. We do know that some plants and animals that used to be common aren't seen much these days. But we're not sure why. Emus, rock wallabies and Gouldian finches are good examples; they seem to be slipping away. We are planning to tackle these obvious threats while we find out more about our wildlife and why it is in trouble.

This means being on country more, looking around, improving our fire work and controlling pests and weeds. We want to work with scientists and do surveys to find out what animals are still here and how we can help them. For some animals we will start monitoring, keeping an eye on their populations over time, to make sure our Rangers' work is getting good results.

About 233 types of land animals are known from the Waanyi / Garawa Aboriginal Land Trust. This includes 142 birds, 21 native mammals, 48 reptiles, 13 frogs, 5 introduced mammals and one introduced toad. There could be more species here because the Land Trust is large, rugged and hard to get around, so no one has had a close look. We think that some threatened wildlife like the Carpentarian Rock-rat, Northern Quoll, Carpentarian Antechinus and Carpentarian Grasswren and Gouldian Finch could be here. We know all these species used to be here or just nearby. They could still be there, hanging on in our country. Some birds considered 'near threatened' in the Northern Territory still live in our country. We still see buff-sided robin, purple-crowned fairy-wren, bush stone-curlew and Pictorella mannikin on the Land Trust even though their country has been damaged by wrong-way fire and over-grazing.

Scientists have found over 500 different types of plants on the Land Trust. Thankfully none are listed as rare or threatened.



*The Northern Sand Goanna, a threatened species that is making a comeback in the region after the population collapsed in the early 1990's as a result of cane toads.*





## Goals

**Plenty of good bush tucker on Waanyi and Garawa country**

**No more native animals lost from our country**

**Healthy native plants and animals**

**Clean up feral animals**

**Get on top of weeds that are already here**

**Keep new weeds out of our country**

## Actions

### **1. Establish regular monitoring to assess trends in the availability of key bush foods**

- a. Use Cybertracker to opportunistically record the presence of traditionally hunted wildlife such as red kangaroo, bustard, echidna, emu, pythons, turtles, and large goannas throughout the IPA

### **2. Undertake specific wildlife conservation activities**

- a. Establish partnerships with non-government or academic agencies to develop and support wildlife conservation projects such as China Wall Refugia, Carpentarian Grasswren Recovery and Wetland Health
- b. Support Waanyi and Garawa land owners direct participation in all wildlife conservation projects
- c. Use, value and promote the intergenerational transfer of Indigenous ecological knowledge within all wildlife conservation activities

### **3. Implement Pest Animal Strategy**

- a. Continue consultation with traditional owners about reducing the number of feral horses on the Land Trust in line with the **Three Tier Warning System**
- b. Halt the growth or spread of the feral buffalo population on the Land Trust by opportunistic shooting
- c. Undertake major aerial survey of feral pests on the Land Trust every four years (refer to Feral Animal Strategy for methodology)
- d. Implement individual **Species Management Plans**

### **4. Control Weeds**

- a. Eradicate, or control & contain known infestations of weeds of national significance (WONS) or other serious weeds
- b. Establish regular surveillance for WONS weeds along roads, at outstations, and areas used by tourists or miners

### 3. Fire

Fire managed well is an important tool for looking after country. Fire may also provide us some income. Each year the Waanyi Garawa Rangers carry out early dry-season burning across the IPA. These fires break up the country, making big wildfires later in the year less likely. The rangers' fires also reduce the amount of fire in our country overall. This cuts down on the amount of smoke going up into the sky. This is important because smoke and other 'greenhouse' gases from savanna fires contribute to climate change.

As part of the Gulf Fire Project, our partners the Darwin Centre for Bushfire Research, Bushfires NT and CSIRO use satellites to annually monitor fires across our region and help us with on-ground research measuring fuel loads. This allows them to see how successful our burning has been and work out how many tonnes of greenhouse gas emissions we've saved each year. These savings can be worked out as "off-sets", which in the future we may be able to sell. This is what's known as Carbon Farming.

Australian carbon farming rules allow companies who pollute to buy "off-sets". These "off-sets" can be more valuable if they come with other proven benefits. For this reason it's important for us to show that when a company buys Waanyi Garawa "off-sets" they are also supporting Indigenous jobs, local economies and healthy country within an internationally recognised IPA. Our carbon credits should have a high level of these 'co-benefits', so they should sell for a premium.

We hope carbon trading will help fund our burning work into the future. So we intend to continue with the Gulf Fire Project as increasing efforts to limit climate change throughout the world should guarantee our fire work gains value in years to come.



*Ranger Donald Shadforth burns a fire plot as part of research collaboration with CSIRO.*



## Waanyi-Garawa ALT Late Fire Frequency

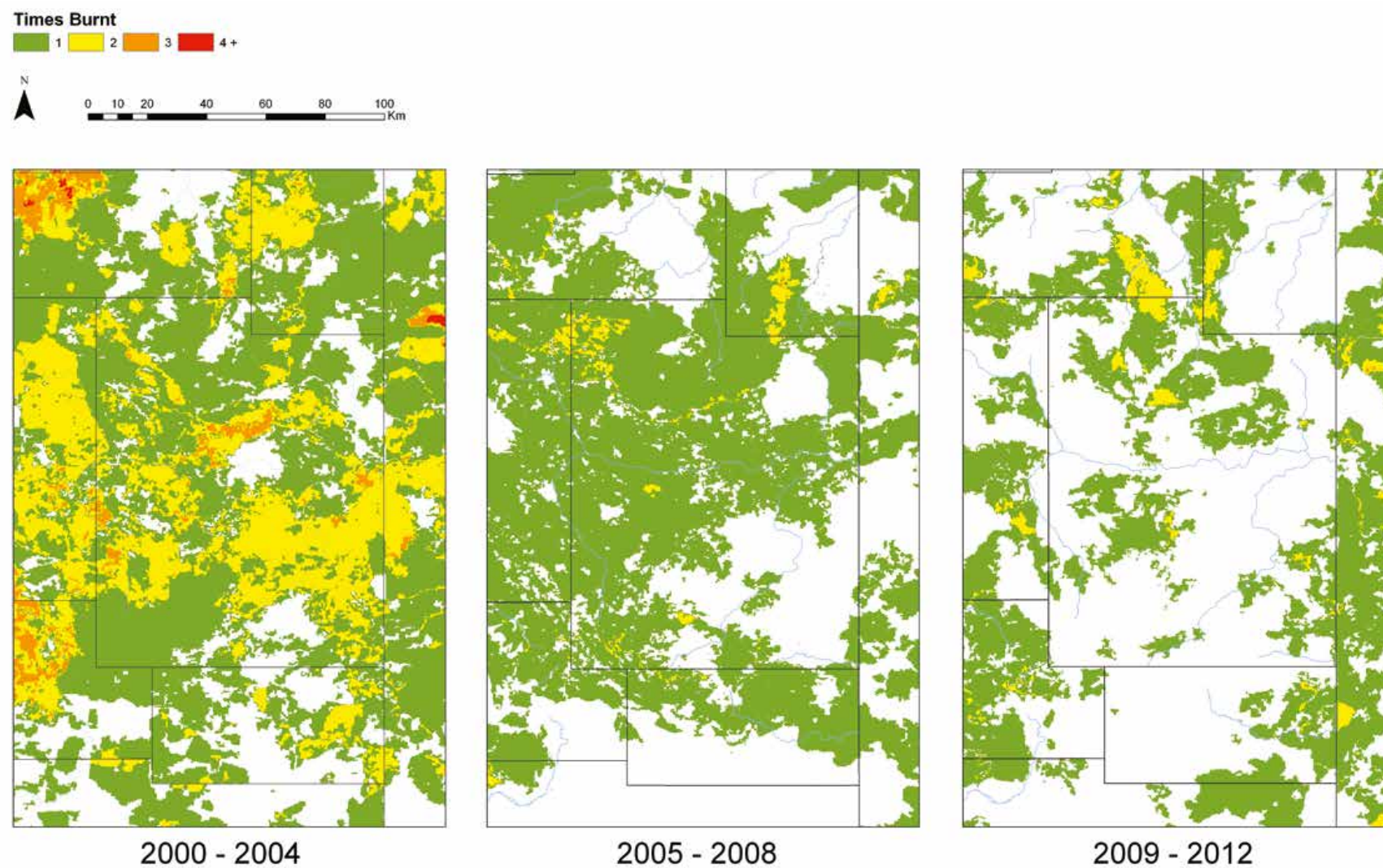


Figure 2: Three fire maps showing a decrease in late dry-season wildfires since Waanyi Garawa Rangers began burning in 2008.

## Goals

*Burning for healthy country, better use of fire*

*No big wildfires*

*Sacred sites protected from fire*

*Outstations protected from fire*

*Resting some of the IPA areas from fire*

*Selling carbon credits at the highest value*

## Actions

### **1. Continue involvement in the Gulf Fire Project**

- a. Contribute to regional on-ground fire monitoring
- b. Support development of the carbon farming methodology for the sub-600mm rainfall zone

### **2. Develop an improved (adaptive) fire management plan for the IPA including strategies for protecting fire-sensitive habitats**

- a. Seek partnerships with non-government agencies to assist with the design and implementation of key conservation projects
- b. Seek input from academic institutes (i.e. Darwin Centre for Bushfire Research, NAILSMA, CDU) in planning for improved fire management

### **3. Complete annual asset protection burns at outstations and other infrastructure, with the support of Traditional Owners**

### **4. Work towards meeting Climate, Community and Biodiversity Standard (CCBS) co-benefit requirements to maximise market value of future carbon credits**

- a. Demonstrate environmental benefits of the fire project
- b. Ensure there are no major negative impacts (i.e. contributing to threatening processes for species of conservation concern) associated with the burning
- c. Define the social and economic impacts (i.e. the Waanyi Garawa Rangers' job security, TO involvement, finances reinvested in natural and cultural management)



## 4. China Wall Country – Mindibirrina

A broad belt of uplifted sandstone bisects the northern third of the IPA. Known as Mindibirrina or “China Wall” these folded slopes provide an elaborate landscape of gorges, scree, boulder fields and high plateaus. Permanent pools and perennial springs held within these ranges lie in stark contrast against their dry and rugged surrounds. These are the places of our ancestors; rock pavements worn smooth by countless generations, walls alive with our art.

Mindibirrina comprises many sacred sites; the area is crisscrossed by songlines and dreamings. All of these sites are significant to us, but some are especially powerful places.

Two outstations, Burrumburru (Dry Creek) and Bajaminyi (Fish River), have been established within this area. These are both used regularly by landowning families whose continued care and use of their country does much to sustain its natural and cultural values.

### Threatened Sites and Wildlife

The ranges forming the China Wall are considered to be of national conservation importance. They are home to many threatened or rare animals and so are formally recognised as the **Wollogorang and China Wall Sandstone Ranges Site of Conservation Significance**, much of which lies within the IPA (see accompanying Biodiversity Map).

Wildlife of conservation concern found here include the Carpentarian rock-rat, Carpentarian antechinus, Carpentarian grasswren, Gouldian finch, Pictorella mannikin, buff-sided robin, purple-naped rock-wallaby, rock ringtail possum, short-eared rock-wallaby and Hosmer’s skink. Conservation of this wildlife strongly depends on protecting the specialised habitats they rely on.



*Mindibirrina (China Wall), is an outstanding feature of the Waanyi Garawa Land Trust. These are the highest ranges in the Northern Territory.*

### Humid Refuges

Many of these animals only persist in a small number of humid pockets found within the dry ranges. Although these refuges are generally well-defined and have some natural shelter from fire, protecting and improving their condition means rigorously keeping fire, weeds and feral animals out. Most, if not all, of these sites are currently degraded. We believe our management activities will improve the health of these sites, and in doing so safeguard the wildlife that relies on them.

The vegetation in most of these places is monsoon vine-forest or swamp bloodwood woodlands. Swamp bloodwood woodlands located at sandstone springs are listed as a Threatened Community over the border in Queensland.



*Malcolm Springs is a special place, hidden in the dry surrounding ranges. Sites like this are very important for the conservation of threatened plant and animals in the southern Gulf.*





### Old-Growth Spinifex

The other important habitat in the Mindibirrira area is hummock grasslands growing on the rugged sandstone uplands. This is key habitat for threatened species such as the Carpentarian rockwren and Carpentarian antechinus both of whom rely on dense, old-growth spinifex for protection from predators, such as cats. Maintaining ample spinifex cover is important for most of the wildlife found in the sandstone ranges of the IPA.

As a result of uncontrolled fire, areas of spinifex more than two or three years old are now uncommon.



*Hosmer's Skink was once common in the southern Gulf. In the last decade this lizard seems to have all but disappeared, possibly as a result of feral cats and wrong-way fire.*

*Image: Nic Gambold*

## Goals

**No more native animals lost from our country**

**Clean up feral animals**

**Get on top of weeds that are already here**

**Keep new weeds out of our country**

**Sacred sites protected from fire**

**Burning for healthy country**

## Actions

### 1. Conduct baseline surveys

- a. Biodiversity surveys of threatened habitats such as springs, gorges and vine thickets on scree slopes in the China Wall ranges
- b. Survey for threatened Grass-wren, Hosmer's skink and rock wallabies in upland spinifex communities
- c. Monitoring: using Cybertracker to annually record the presence, or, absence of wildlife of conservation concern in the China Wall area

### 2. Reduce feral animal impacts on vulnerable sites

- a. Restrict horse and cattle access to springs and other humid refuges in the ranges by fencing, trapping and culling

### 3. Control weeds

- a. Spray, or otherwise remove grassy weeds in or around spring forest habitats and other humid sites in the ranges
- b. Avoid the spread of weeds to these sites

### 4. Control fire

- a. Undertake protection burning around springs and vine-thickets, ahead of more broad-scale prescribed burning
- b. Plan to avoid burning spinifex grasslands within the ranges



## 5. Plains Country – Wangalinji

The Nicholson Block was for many years used as a common, its grazing areas shared between adjoining properties. Unfortunately this practice continues today, even though we now have freehold title to our land. Neighbouring cattle stations allow their stock to graze onto our Land Trust, mustering them annually once the standing waters evaporate. Obviously, there is no incentive for them to share the expense of fencing our common boundaries, but their stock adds significantly to the impact of feral animals on our land.

There may be opportunities here for us. Most landowners would like to see an end to this unauthorised grazing. Completing and maintaining a boundary fence would do this, as well as help us muster and control the wild, unbranded cattle that remain.

### Tablelands Wildlife

The cracking-clay plains below the Nicholson Basin are effectively a northern extension of the Barkly Tablelands. They support good numbers of the threatened Australian bustard, as well as red kangaroo, emu, nail-tail wallaby and bush stone-curlew. Although poorly known (never surveyed), it is possibly that many of the specialist black-soil species of the Mitchell Grass Downs are found here. Importantly, this area represents one of the few of its kind in the Northern Territory not being used for intensified grazing.



*Fertile cracking-clay plains in the IPA are important for bush foods and cattle alike.*

## Goals

**No more native animals lost from our country**

**Clean up feral animals**

**No big fire in our paddocks, no risk to our cattle station neighbours**

**Keep new weeds out of our country**

**Control weeds that are already here and stop them spreading**

## Actions

### 1. Conduct baseline surveys

- a. Biodiversity surveys of grasslands on cracking-clay plains

### 2. Control feral animals

- a. Support commercial uses for feral horses, pigs and wild cattle, e.g. pet-meat contracting
- b. Where suitable, establish safe watered holding paddocks for captive horses close to outstations (e.g. Nudjabarra, Wangalinji, Siegel Creek)
- c. Where suitable, establish small “killer” herds of wild-caught cattle in watered holding paddocks close to outstations
- d. Close boundary fences on the eastern and southern boundaries to stop cattle moving onto the Land Trust from neighbouring pastoral stations
- e. Control feral cats at water points (dams, troughs, windmills)

### 3. Control fire

- a. Plan to avoid burning open grasslands
- b. Where possible establish fire breaks between neighbouring properties

### 4. Control weeds

- a. Undertake annual surveillance for WONS weeds
- b. Eradicate, or control/contain and monitor outbreaks of WONS weeds



## 6. Freshwater

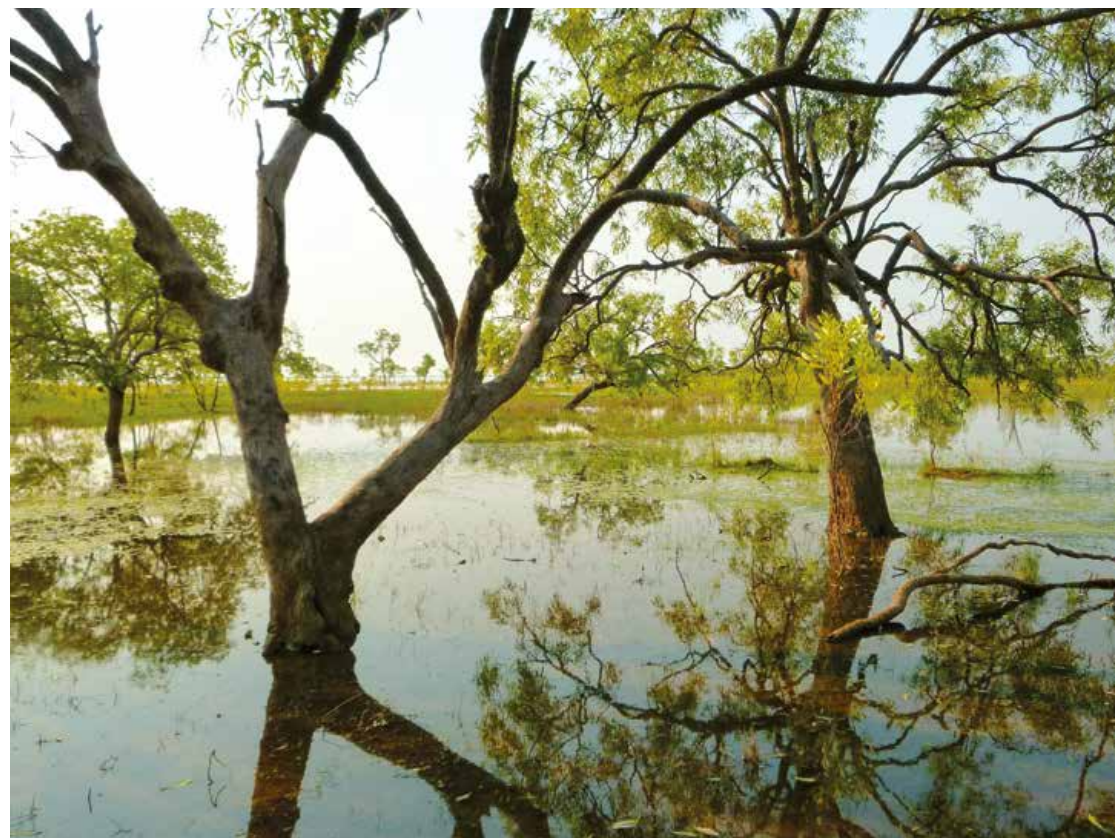
### Rivers and Wetlands

Our IPA overlies virtually the entire catchment of the Nicholson River in the Northern Territory. As its custodians we intend to look after it. Known to us as *Ganalanja*, this river and its feeder creeks run clear through our country bringing life and opportunity. Cultural sites, traditional camping areas and historic places lie scattered along its course. Its floodouts and billabongs are the richest pockets of biodiversity in our country.

To Waanyi and Garawa, *Ganalanja* and many of the waterholes and wetlands in our country are sacred places. Like Nadjabarra billabong, the resting place of *Bujimala* the rainbow serpent, these are areas where spirits reside and where only the right people may safely approach. Protecting these places is a major concern for us. Too often we have seen them damaged or desecrated through unthinking use by graziers, road-works teams and tourists. Our cultural sites deserve greater respect. On our Land Trust and throughout our IPA we have the opportunity to care for these special places.

### Weeds

The rich soils of wetlands and waterways are good places for weeds. The flowing water carries seeds and spreads weeds quickly along the banks of the creeks and rivers. In the Gulf there are a few weeds we need to watch closely for, plants that can cause big problems if they take hold. Rubber-vine and Parkinsonia are the biggest threats, but others like blue trumpet vine and couch grass also pose a large threat to the health of our waterways.



*Wangalinji wetlands are a vast coolibah flood-out covering an area of roughly 30 square kilometres in the central west of the IPA.*

### Mining impacts

Unlike most other places in Australia our rivers are still in good health. This is partly because they remain unpolluted from exploitative land uses like mining. It is important to us that if we agree to exploration, subsequent mining is carried out in a careful and respectful way, with a view to the long-term health of our water resources. Of course this is particularly important with dangerous radioactive minerals such as Uranium.

### Feral Animals

Feral animals are now common throughout our IPA but it is freshwater areas that are most at risk from their impacts. In particular Jumbarrda wetlands, Siegel Creek, Dry Creek/Fish Rivers, Nicholson River, Wangalinji (Caulfield claypans) and Brumby Spring are identified as sites under pressure. All of these permanent or seasonal wetlands have significant biodiversity and cultural value. For these six areas we intend to carry out annual feral animal monitoring. Every three years we also hope to conduct a general aerial survey for pest animals across our IPA. Results from this monitoring will inform a three-tier warning system which will help Waanyi and Garawa land owners make informed decisions about how to best manage this problem.

**For more information on feral animals see the accompanying Pest Animal Management Strategy**



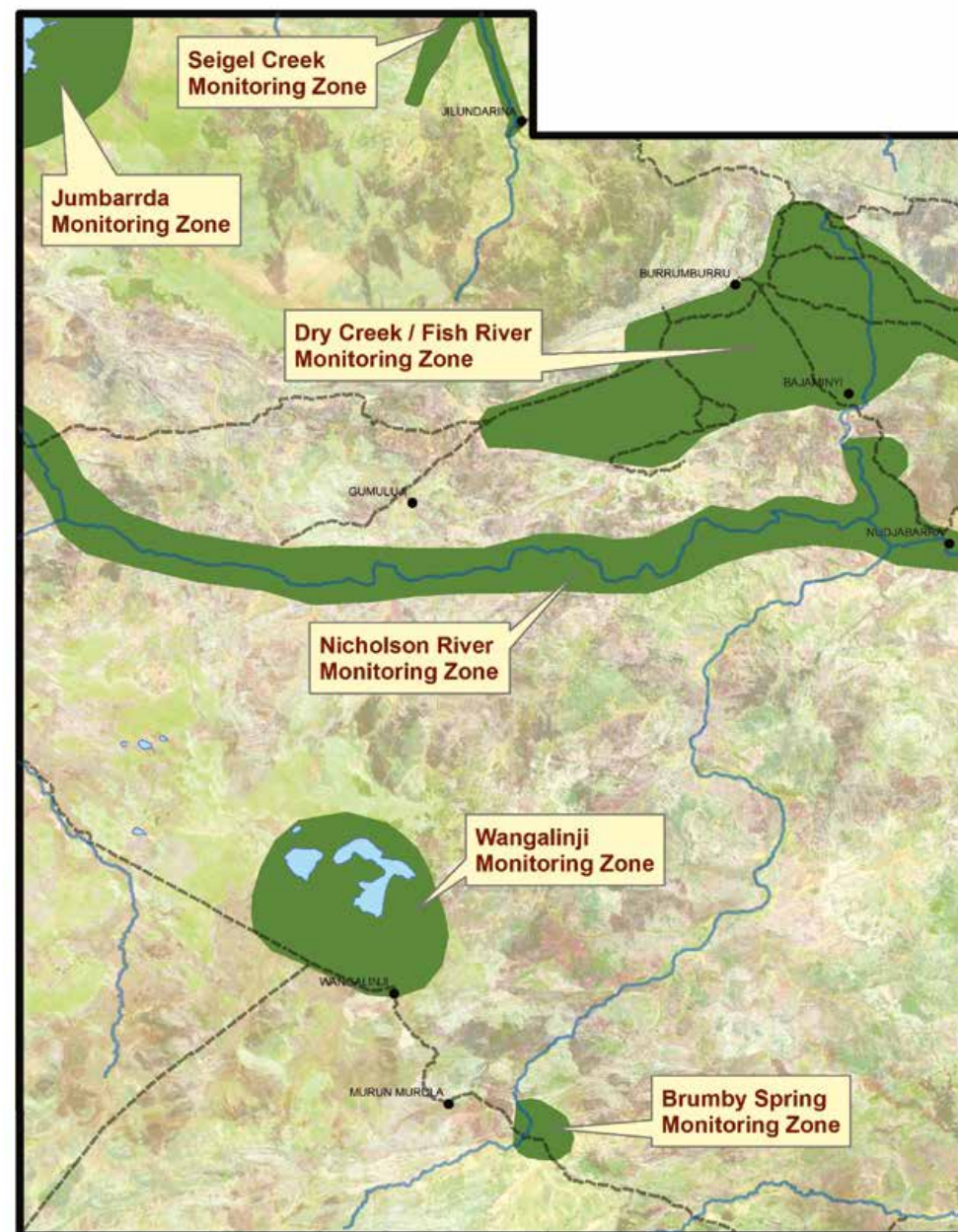
*Three types of freshwater turtle live in the creeks and waterholes of the IPA. All are important traditional foods for Waanyi and Garawa.*



## Feral Animal Management

Figure 3: Six key wetland areas for feral animal management.  
For further detail please refer to the accompanying document:  
*Waanyi Garawa ALT Feral Animal Management Strategy*.

S. Eldridge: Desert Wildlife Services 2012.



## Goals

**Clean water and healthy wetlands**

**Get on top of weeds that are already present**

**Keep new weeds out of our country**

**Clean up feral animals**

**Burning for healthy country**

**Sacred sites protected from fire**

## Actions

### 1. Conduct baseline surveys

- a. Biodiversity surveys of seasonal wetlands such Wangalinji and Jumbarrda, aquatic systems such as major rock holes on Fish River and long-reaches on the Nicholson River
- b. Targeted survey of freshwater turtles including the Endangered Gulf Snapping Turtle

### 2. Control weeds

- a. Control/contain and monitor outbreaks of serious weeds (including Parkinsonia and bellyache bush) at six wetlands or other known sites
- b. Undertake regular surveillance along rivers and creeks for Weeds of National Significance (WONS) and those on the National Environmental Alert List (NEAL), in particular rubber vine and blue trumpet vine

### 3. Control feral animals

- a. Undertake annual aerial survey of six key wetland sites (see Figure 3.) for feral pests (refer to Feral Animal Strategy for methodology)
- b. Annually monitor six key wetland sites (see Figure 3.) for feral animal impacts i.e. browsing, review annual trends against Warning Levels (for all pest species)
- c. Monitor six key wetlands for water quality; review annual trends against Warning Levels (or all pest species)
- d. With land owner approval; reduce the number of feral horses and cattle as necessary
- e. Reduce the feral pig population in the Wangalinji and Jumbarrda Swamp areas using trapping, shooting and or baiting
- f. Establish monitoring for key effected species i.e. purple-crowned fairy-wren populations in key management areas

### 4. Control fire

- a. Reduce the overall frequency and intensity of fires in wetlands and along rivers and creeks.
- b. Support burning by Junggayi or plan to avoid fire in culturally significant wetlands



## 7. Rangers

Waanyi Garawa Rangers are the team responsible for putting our IPA Plan of Management into practice. The Rangers came together in early 2005, mainly in response to the serious wildfire problem across our Land Trust. Since then their skills, experience and capacity have grown and they now provide a wide range of land management services for our Land Trust.

Waanyi and Garawa Rangers have been involved in wildlife surveys, weed and feral animal control and fire control on the Land Trust and neighbouring properties. They are closely linked to the Garawa Rangers from Robinson River (Garawa Aboriginal Land Trust). Garawa Rangers also formed in 2005. These groups share equipment and staff, working side by side on local problems like wildfire and weed control.

Traditional owners and managers strongly support the rangers. They provide a valuable link to our county, a connection bringing peace of mind to Waanyi and Garawa people living away from their land in towns such as Doomadgee, Tennant Creek and Borroloola. The rangers' work keeps us all in touch with our land. It gives us pride in being Traditional Aboriginal Land Owners.



*Ranger Coordinator Jimmy Morrison clearing out a spring on a country visit with community members.*

## Ranger Skills and Experience

When we moved off our country in the mid-1990's big wildfires took over. For more than ten years wildfires swept across the southern Gulf. In 2004, a fire that started on the Land Trust burnt out nearly 15 million hectares of station country. We saw the damage that wildfires were doing to our land and neighbouring properties. So in 2007 with support from NT Bushfires the rangers started doing controlled burning. In 2011 they won a Northern Territory Indigenous Landcare Award for their fire work. Waanyi Garawa Rangers are still doing fire work, these days as part of the Southern Gulf Carbon Project. We are also looking into turning their fire work into a carbon farming business, selling carbon credits for profit.

## Staff

The Waanyi Garawa Rangers are also traditional owners and managers involved in the spiritual and cultural life of our land. These roles can't be separated. Their professional roles are confirmed and enriched by their cultural connections to country and their standing within our community. The rangers' capacity as a team will also be enhanced by recognition of these assets. It is necessary that their professional development takes into account seniority, community responsibilities and cultural obligations. It is important that employment arrangements accommodate these aspects of ranger's lives, rather than work against them.

Variety and stability of work will ensure our rangers remain committed and enthusiastic. Work programs for the IPA must balance the benefits of relying on existing skills with the challenge of developing experience and new capabilities. Whether out bush or in town, at all times our rangers must have meaningful work to do.

## Training

Rangers will require additional training to carry out some of the activities described in this plan. In particular the use of firearms, herbicides and 1080 or sodium nitrite based pig baits all require accreditation and / or licencing. Greater involvement in planning and administering the IPA will call for a diverse skills-base. Training for rangers should reflect this with individuals encouraged and supported through their employment to complete courses in areas such as environmental management, heritage protection, administration, project management and corporate leadership. Ideally our rangers will also gain accreditation while 'on the job', building on their participation and experience in technically complex projects and research collaborations.





### Health and Safety

Safety is major concern for us; our rangers carry out dangerous work in isolated locations and are often accompanied by trainees or senior land owners. Adequate training is important especially regular First Aid (Certificate 1) and accredited Fire Fighting NT (Certificate 1 & 2). Rangers' work can be taxing and stressful so it is important they are well supported in their work. Poor management decisions and over-administration can create big problems for workers out bush, but it is equally important that our rangers don't take shortcuts and put themselves at risk. Everyone must be aware and respectful of the difficulties of this work and so plan for safety.

### Tools, Equipment and Accommodation

Our rangers must have equipment and transport appropriate to their activities and they must be trained to use and maintain these assets. Grant funding for capital items such as vehicles is rare and irregular. It is important that all IPA project budgets include pro-rata funding adequate to the operation, maintenance and eventual replacement of vehicles and equipment.

We hope to set up a Ranger Base within the IPA. This would let the rangers stay out on country for longer, do more work, more efficiently and safely and not have to constantly transport equipment back and forwards over hundreds of kilometres. We have chosen Wallace Creek outstation for this new purpose. It is still in reasonable condition and well-equipped. We plan to fix up the existing buildings so the rangers have accommodation, a phone, reliable water and a secure storage area.

### Partnerships and Funding

Better links with research scientists and government agencies will help us move towards our goals faster. These partnerships bring knowledge, skills and resources that can compliment our rangers' abilities and empower our IPA. Supportive philanthropic/conservation organisations like Bush Heritage Australia (BHA) who we have been working with can really help with kick-starting new projects or businesses. Importantly they can help us to source funds for things that the government doesn't fund. We also see a need to make better use of available government programs. We want to put more effort into getting grants, deal more directly with the government, and talk up strongly for our IPA.

## Goals

**Increased Ranger group capacity through better coordination, greater variety of work and more community involvement in the IPA**

**All Ranger staff receive appropriate wages and work in a safe, friendly and supportive environment**

**All Ranger staff have access to appropriate, accredited training**

**Rangers' tools, equipment and vehicles are safe, well serviced and well suited to their purpose**

**Partnerships & funding arrangements are long-lasting and mutually beneficial**

## Actions

### 1. Accredited training for IPA management activities

- a. Firearms training and shooter's licences
- b. ChemCert Certificate (Levels 1, 2 & 3) plus 1080 Users' Certificate
- c. On-going First Aid and fire safety training
- d. Vehicle maintenance and repair
- e. Information Technology use and maintenance
- f. Work Readiness for Cadet rangers
- g. Natural and Cultural Resource Management, at Certificate & Degree levels

### 2. Rangers' annual work program to match the IPA Plan of Management

- a. Develop work plans from the IPA Plan of Management and match ranger activities with cultural and seasonal priorities
- b. Develop work rosters to ensure individual rangers gain experience in a wide range of activities
- c. Annually review rangers activities against Targets in the IPA Plan of Management

### 3. Rangers' equipment adequate and regularly serviced or replaced

- a. Establish an inspection and maintenance program for all vehicles and equipment
- b. Upgrade and maintain Wallace Creek outstation as a Remote Base for the rangers
- c. Include realistic transport costs in all project funding to accrue maintenance & replacement funds
- d. Apply regularly and broadly for assistance in the purchase of new vehicles and equipment

### 4. Support broader community involvement in IPA activities

- a. Within all projects, identify roles for landowners and encourage their support
- b. Establish casual positions or 'day payment' protocols for landowners involved in IPA projects
- c. Establish and operate one or more projects specifically aimed at using, valuing and passing down traditional ecological knowledge & skills
- d. Establish recruitment procedure for Cadet Rangers





## 8. Governance

### **Jungkur Ngambarla Ngurukar Burkarmbiyinyi “We are all sitting strong together”**

This means we need good **Governance**. This is important because our aims are high, if we hope to protect our land and wildlife, safeguard our sacred sites and set up business on country for jobs and income. To do this we all need to work together, as a team. We intend to build better governance at three levels. Better day to day administration of our rangers, more effective management of our IPA, and importantly, coordination between Waanyi and Garawa and other Indigenous land and sea management groups in the southern Gulf.

### **Traditional Land Ownership**

Our governance is built on our customary law. *Minggirringi* and *Junggayi* are central to Waanyi and Garawa customary governance because they set out responsibilities to land and ceremony and much more. Each land holding group has senior *Minggirringi* and *Junggayi* who play a vital role in land management.

### **IPA Governance**

The *Aboriginal Land Rights (Northern Territory) Act* recognises *Minggirringi* and *Junggayi* and gives them strong authority under Australian Law. Our Waanyi/Garawa IPA Management Committee is therefore made up of *Minggirringi* and *Junggayi* or their representatives. This Committee is nominated by the traditional owners. It will meet at least twice a year, to review and direct the operation of the IPA. They will listen to our rangers and make sure the IPA is moving in the right direction. Staying true to our IPA Plan of Management and meeting the land owners’ realistic expectations. Representatives from the IPA funding body, the Department of Prime Minister and Cabinet, or other partner organisations may also be invited onto our Management Committee.

### **Gulf Regional Governance**

There are several Aboriginal ranger groups working in the southern Gulf and northern Barkly Tablelands. Many of the same land management and service delivery problems frustrate us. Governance at this higher level will help us bring more government assistance, services and attention to our region. It will help us stay connected to the wider world and our countrymen and women working in neighbouring land and sea management groups. It will give us a much stronger voice for our region.

We are working with other Aboriginal land owners in the Gulf and North Barkly regions to set up the **Southwest Gulf Land and Sea Management Company**. This will be a company to apply for, hold and administer grant funding for our IPA, ranger programs and future income from carbon farming business or other activities we undertake. The role of this Aboriginal, not-for-profit company will only be to assist Aboriginal traditional owners and managers to protect the natural and cultural values of their land.

**Traditional Aboriginal Owners support IPA declaration, approve a Plan of Management and elect an IPA Steering Committee**

**Traditional Owners**

**IPA Steering Committee oversees land management, with support from Northern Land Council and Gulf Land and Sea Management Company, reports to broader Waanyi and Garawa community**

**Northern Land Council**

**IPA Steering Committee**

**Gulf Hub Land and Sea Management**

**Waanyi Garawa Rangers manage IPA in line with the Plan of Management. They are accountable to Traditional Owners via the Steering Committee**

**Waanyi Garawa Rangers**

Figure 4: Governance model for the Ganalanga-Mindibirrina IPA





## Goals

*All families working together*

*Making better decisions for our country*

*Having an IPA and supporting our rangers*

*Being part of a Gulf region company for Indigenous land and sea management*

## Actions

### **1. Continue IPA facilitated land management planning**

- a. Bring a broader Traditional Owner group together every five years to revise the IPA Plan of Management
- b. Work with neighbouring Indigenous groups for more coordinated delivery of Land and Sea Management in the Gulf region

### **2. Establish IPA Management Committee**

- a. Meet twice yearly
- b. Ensure a minimum of 5 clan groups are represented

### **3. Dedicate the Ganalanga-Mindibirrina IPA**

- a. Submit Plan of Management to the Australian Government
- b. Advocate for and join in a Southern Gulf Regional Land and Sea Management Company

# Appendix 1:

## Goals, Actions and Indicators for all Ganalanga-Mindibirrira IPA Targets

Target/Goals	Actions	Indicators
<b>Community and Culture</b>		
<b>Living on Country</b>	<p><b>Maintain outstations</b></p> <ul style="list-style-type: none"> <li>a. Confirm service agency responsibility for each outstation and submit requests for annual maintenance</li> <li>b. Monitor and protect outstation infrastructure, undertake annual protection burning, weed and termite control, perimeter fencing, roof, window and door repairs</li> <li>c. Maintain bores prioritise on basis of cost, water quality and locational need</li> <li>d. Maintain minimum necessary road/track network, prioritise on basis of cost, annual condition assessment and future funding availability</li> <li>e. Establish and maintain telecommunications facilities at key outstations</li> </ul>	<p><i>Four or more outstations with water, phones, power and adequate access</i></p> <p><i>Rangers protecting all outstations from fire, theft and vandalism</i></p> <p><i>People living on outstations feel safer</i></p> <p><i>Roads and tracks adequate and serviceable</i></p>
<b>Teaching our children culture and language</b>	<p><b>Establish School Cultural projects and Traditional Ecological Knowledge projects on the Land Trust</b></p> <ul style="list-style-type: none"> <li>a. Develop or support existing cultural awareness programs in Doomadgee and Borroloola schools</li> <li>b. As an IPA project, seek collaboration with a Linguist, establish and support a Language and Ethno-ecology project linked to the Land Trust</li> <li>c. Rangers to support annual “Country Visits” for Waanyi Garawa community</li> <li>d. Rangers and IPA to support their community living and working on country help with mustering, fencing and feral animal control</li> </ul>	<p><i>Children visiting country regularly</i></p> <p><i>There is help for families to get out on country, visit outstations</i></p>





Target/Goals	Actions	Indicators
<b>Holding ceremonies</b>	<b>Support for Ceremony</b> <ul style="list-style-type: none"> <li>a. Establish Ceremonial Support as a priority under the IPA and within the Rangers' work schedule</li> </ul>	<i>Ceremonies happening on country</i>
<b>Jobs on country</b>	See actions under Target <b>Rangers</b>	<i>More Waanyi and Garawa Rangers</i>
<b>Waanyi and Garawa owned businesses, based on our culture and our land</b>	<b>Rangers to support local enterprises where practical</b> <ul style="list-style-type: none"> <li>a. Rangers and IPA to support their community living and working on country help with mustering, fencing and feral animal control</li> <li>b. Always seek to undertake IPA activities and infrastructure development in ways that will support or enhance community enterprise initiatives</li> </ul>	<i>New businesses like carbon farming and tourism on our land</i>

Target/Goals	Actions	Indicators
<b>Wildlife</b>		
<b>Plenty of good bush tucker on Waanyi and Garawa country</b>	<p><b>Establish regular monitoring to assess trends in the availability of key bush foods</b></p> <ul style="list-style-type: none"> <li>a. Use Cybertracker to opportunistically record the presence of traditionally hunted wildlife such as red kangaroo, bustard, echidna, emu, pythons, turtles, and large goannas throughout the IPA</li> </ul>	<p><i>Hunting and fishing is good</i></p> <p><i>Bush tucker is still plentiful</i></p> <p><i>Our children are learning about caring for country, on country</i></p>
<b>Healthy native plants and animals</b>	<p><b>Undertake specific wildlife conservation activities</b></p> <ul style="list-style-type: none"> <li>a. Establish partnerships with non-government or academic agencies to develop and support wildlife conservation projects such as China Wall Refugia, Carpentarian Grasswren Recovery and Wetland Health</li> <li>b. Support Waanyi and Garawa land owners direct participation in all wildlife conservation projects</li> <li>c. Use, value and promote the intergenerational transfer of Indigenous ecological knowledge within all wildlife conservation activities</li> </ul>	<p><i>We are working with scientists to find out more about our wildlife</i></p> <p><i>Our families take part in this work</i></p>
<b>Clean up feral animals</b>	<p><b>Implement Pest Animal Strategy</b></p> <ul style="list-style-type: none"> <li>a. Continue consultation with traditional owners regarding reducing the number of feral horses on the Land Trust in line with the <i>Three Tier Warning System</i></li> <li>b. Halt the growth or spread of the feral buffalo population on the Land Trust by opportunistic shooting</li> <li>c. Undertake major aerial survey of feral pests on the Land Trust every four years (refer to Feral Animal Strategy for methodology)</li> <li>d. Implement individual <i>Species Management Plans</i></li> </ul>	
<b>Get on top of weeds that are already here</b>	<ul style="list-style-type: none"> <li>a. Eradicate, or control and contain known infestations of Weeds of National Significance (WONS) or other serious weeds</li> </ul>	<i>No serious weed infestations exist untreated in the IPA</i>
<b>Keep new weeds out of our country</b>	<ul style="list-style-type: none"> <li>a. Establish regular surveillance for WONS weeds along roads, at outstations, and areas used by tourists or miners</li> </ul>	<i>No new WONS weeds have infested our IPA</i>





Target/Goals	Actions	Indicators
<b>Fire</b>		
<b>Burning for healthy country</b>	<p><b>Develop an improved (adaptive) fire management plan for the IPA including strategies for protecting fire-sensitive habitats</b></p> <ul style="list-style-type: none"> <li>a. Seek input from academic institutes (i.e. Darwin Centre for Bushfire Research, NAILSMA, CDU) in planning for improved fire management</li> </ul>	<i>Neighbours support our fire work and attend fire planning meetings</i>
<b>No big wildfires</b>	<p><b>Continue involvement in the Gulf Fire Project</b></p> <ul style="list-style-type: none"> <li>a. Conduct annual prescribed burning</li> <li>b. Contribute to regional ground monitoring</li> <li>c. Support development of carbon farming methodology for the sub-600mm rainfall zone</li> </ul>	<i>Less late-season (Sept to March) wildfire</i>
<b>Sacred sites protected from fire</b>	<b>With approval of Minggirringi and oversight of Junggayi establish fire breaks to protect sites or areas of cultural significance</b>	<i>Waterways and gorges and cultural sites remain unburnt</i>
<b>Outstations protected from fire</b>	<b>With the support of traditional owners complete annual asset protection burns at outstations and other infrastructure</b>	<i>No loss of outstation buildings or equipment to fire</i>
<b>Resting some of the IPA areas from fire</b>	<p><b>Develop an improved (adaptive) fire management plan for the IPA including strategies for protecting fire-sensitive habitats</b></p> <ul style="list-style-type: none"> <li>a. Seek partnerships with non-government or academic agencies to assist with the design and implementation of key conservation projects</li> <li>b. Seek input from academic institutes (i.e. CSIRO or Darwin Centre for Bushfire Research, CDU) in planning for improved fire management</li> </ul>	<i>More early (April to August) burning</i>
<b>Selling carbon credits at the highest value</b>	<p><b>Work towards meeting Climate, Community and Biodiversity Standard (CCBS) co-benefit requirements to maximise market value of future carbon credits</b></p> <ul style="list-style-type: none"> <li>a. Demonstrate environmental benefits of the fire project</li> <li>b. Ensure there are no major negative impacts (i.e. sacred site damage or increase in threatening process(es) for species of conservation concern) associated with the burning</li> <li>c. Define the social and economic impacts (i.e. Waanyi Garawa Rangers' job security, TO involvement, income reinvested in natural and cultural resource management)</li> </ul>	<i>Fire Project registered under national Carbon Farming Initiative</i>

Target/Goals	Actions	Indicators
<b>Rangers</b>		
<b>Increased Ranger group capacity through better coordination, greater variety of work and greater engagement with external partners</b>	<b>Rangers' annual work program to match IPA Plan of Management</b> <ul style="list-style-type: none"> <li>a. Develop work plans from the IPA Plan of Management and match ranger activities with cultural and seasonal priorities</li> <li>b. Develop work rosters to ensure individual rangers gain experience in a wide range of activities</li> <li>c. Annually review rangers activities against Targets in PoM</li> </ul>	<p><i>Number of projects rangers are involved in is increasing</i></p> <p><i>Waanyi Garawa Rangers are managed by a local Aboriginal organisation</i></p> <p><i>There are at least two projects in partnership with researchers, or other external organisations</i></p>
<b>All Ranger staff receive appropriate wages and work in a safe, friendly and supportive environment</b>	<b>Regular review of Rangers' work conditions and employment status</b> <ul style="list-style-type: none"> <li>a. Annually assess Rangers' satisfaction with their work</li> <li>b. Annually assess Rangers' training and equipment needs</li> <li>c. Annually review individual Ranger's productivity, provide constructive feedback</li> <li>d. Establish graded employment providing incentives via promotions based on accreditation attainment, operational achievement, and cultural standing</li> </ul>	<p><i>Ranger staff believe management of their program is effective and responsive</i></p> <p><i>Ranger staff are satisfied with their general employment conditions</i></p> <p><i>Ranger staff are satisfied with and fulfilled by the work they do</i></p>
<b>All Rangers have access to appropriate, accredited training</b>	<b>Accredited training for IPA management activities</b> <ul style="list-style-type: none"> <li>a. Firearms training and shooter's licences</li> <li>b. ChemCert Certificate (Levels 1, 2 and 3) plus 1080 Users' Certificate</li> <li>c. On-going First Aid and fire safety training</li> <li>d. Vehicle maintenance and repair</li> <li>e. Information Technology use and maintenance</li> <li>f. Work Readiness for Cadet rangers</li> <li>g. Natural and Cultural Resource Management, at Certificate and Degree levels</li> </ul>	<p><i>The number and type of qualifications or accreditations amongst staff is increasing</i></p>



Target/Goals	Actions	Indicators
<b>Rangers' tools, equipment and transport are safe, well serviced and well suited to their purpose</b>	<p><b>Ranger's equipment adequate and regularly serviced or replaced</b></p> <ul style="list-style-type: none"> <li>a. Establish inspection and maintenance program for all vehicles and equipment</li> <li>b. Upgrade and maintain Wallace Creek outstation as a Remote Ranger Base</li> <li>c. Include realistic transport costs in all project funding to accrue maintenance and replacement funds</li> <li>d. Apply regularly and broadly for assistance in the purchase of new vehicles and equipment</li> </ul>	<p><i>Rangers' vehicles and equipment are adequately maintained and regularly replaced</i></p> <p><i>Rangers have a remote work base, in the IPA</i></p>
<b>More community involvement in the IPA and ranger work</b>	<p><b>Support broader community involvement in IPA activities</b></p> <ul style="list-style-type: none"> <li>a. Within all projects, identify roles for landowners and encourage their support</li> <li>b. Establish casual positions or 'day payment' protocols for landowners involved in IPA projects</li> <li>c. Establish and operate one or more projects specifically aimed at using, valuing and passing down traditional ecological knowledge and skills</li> <li>d. Establish recruitment procedure for Cadet Rangers</li> </ul>	<p><i>The number of casual staff employed is stable or increasing from year to year</i></p> <p><i>More community members are involved in IPA activities</i></p> <p><i>Traditional Owners aware of and support rangers' work on their country</i></p>



Target/Goals	Actions	Indicators
<b>China Wall</b>		
<b>No more native animals lost from our country</b>	<b>Conduct baseline surveys</b> <ul style="list-style-type: none"> <li>a. Biodiversity surveys of threatened habitats such as springs, gorges and vine thickets on scree slopes in the China Wall ranges</li> <li>b. Survey for threatened Grass-wren, Hosmer's skink and rock wallabies in upland spinifex communities</li> <li>c. Monitoring using Cybertracker to annually record the presence, or, absence of wildlife of conservation concern in the China Wall area</li> </ul>	<i>Threatened species are still here and the country is being managed for them</i>
<b>Clean up feral animals</b>	<b>Reduce feral animal impacts on vulnerable sites</b> <ul style="list-style-type: none"> <li>a. Restrict horse and cattle access to springs and other humid refuges in the ranges using fencing, trapping and culling</li> </ul>	<i>No pest animals in our springs and gorges</i>
<b>Get on top of weeds that are already here</b>  <b>Keep new weeds out of our country</b>	<b>Control weeds</b> <ul style="list-style-type: none"> <li>a. Spray or otherwise remove grassy weeds in or around spring forest habitats and other humid sites in the ranges</li> <li>b. Avoid spread of weeds to these sites</li> </ul>	<i>Weeds not fueling fires in spring forests</i>  <i>Weeds not invading spring forests</i>
<b>Sacred sites protected from fire</b>  <b>Burning for healthy country</b>	<b>Control fire</b> <ul style="list-style-type: none"> <li>a. Undertake protection burning around springs and vine-thickets, ahead of more broad-scale prescribed burning</li> <li>b. Plan to avoid burning spinifex grasslands within the ranges</li> </ul>	<i>No fire in our 'special places'</i>  <i>Plenty of old spinifex on the ranges</i>



Target/Goals	Actions	Indicators
<b>Freshwater</b>		
<b>Clean water and healthy wetlands</b>	<b>Conduct baseline surveys</b> <ul style="list-style-type: none"> <li>a. Biodiversity surveys of seasonal wetlands such Wangalinji and Jumbarrda, aquatic systems such as major rock holes on Fish River and long-reaches on the Nicholson River</li> <li>b. Targeted survey of freshwater turtles including the Endangered Gulf Snapping Turtle</li> </ul>	<i>We know more about the health of our wetlands and our sacred sites</i>
<b>Get on top of weeds that are already here</b>  <b>Keep new weeds out of our country</b>	<b>Control weeds</b> <ul style="list-style-type: none"> <li>a. Control/contain and monitor outbreaks of serious weeds (including Parkinsonia and bellyache bush) at six wetlands or other known sites</li> <li>b. Regular surveillance along rivers and creeks for Weeds of National Significance (WONS) and those on the National Environmental Alert List (NEAL), in particular rubber vine and blue trumpet vine</li> </ul>	<i>No big weed problems</i>  <i>No weeds taking over our wetlands</i>
<b>Clean up feral animals</b>	<b>Control feral animals</b> <ul style="list-style-type: none"> <li>a. Undertake annual aerial survey of six key wetland sites (See Figure 3.) for feral pests (refer to Feral Animal Strategy for methodology)</li> <li>b. Annually monitor six key wetland sites (See Figure 3.) for feral animal impacts i.e. browsing, review annual trend against Warning Levels (for all pest species)</li> <li>c. Monitor six key wetlands for water quality review annual trend against Warning Levels (for all pest species)</li> <li>d. With land owner approval reduce the number of feral horses and cattle as necessary</li> <li>e. Reduce the feral pig population in the Wangalinji and Jumbarrda Swamp areas using trapping, shooting and or baiting</li> <li>f. Establish monitoring for key effected species i.e. purple-crowned fairy-wren populations in key management areas</li> </ul>	<i>Country coming back around wetlands and along creeks</i>  <i>Overall, fewer feral horses, wild cattle and pigs on our land</i>  <i>Less impact by feral animals on native wildlife</i>
<b>Burning for healthy country</b>  <b>Sacred sites protected from fire</b>	<b>Control fire</b> <ul style="list-style-type: none"> <li>a. Reduce the overall frequency and intensity of fires in wetlands and along rivers and creeks</li> <li>b. Support burning by Junggayi or plan to avoid fire in culturally significant wetlands</li> </ul>	<i>Edge of wetlands green and shady</i>  <i>Rivers clean and clear</i>  <i>Proper burning in sacred areas</i>

Target/Goals	Actions	Indicators
<b>Plains</b>		
<b>No more native animals lost from our country</b>	<b>Conduct baseline surveys</b> <ul style="list-style-type: none"> <li>a. Biodiversity surveys of grasslands on cracking-clay plains</li> </ul>	<i>Threatened species are still here and the country is being managed for them</i>
<b>Clean up feral animals</b>	<b>Control feral animals</b> <ul style="list-style-type: none"> <li>a. Support commercial uses for feral horses, pigs and wild cattle, e.g. pet-meat contracting</li> <li>b. Where suitable, establish safe watered holding paddocks for captive horses close to outstations (eg Nudjabarra, Wangalinji, Siegel Creek)</li> <li>c. Where suitable, establish small “killer” herds of wild-caught cattle in watered holding paddocks close to outstations</li> <li>d. Close boundary fences on the eastern and southern boundaries to stop cattle moving onto the Land Trust from neighbouring pastoral stations</li> <li>e. Control feral cats at water points (dams, troughs, windmills)</li> </ul>	<i>Wild cattle behind wire</i>  <i>Brumbies caught, sold, or shot</i>  <i>Fewer pigs and cats</i>
<b>No big fire in our paddocks, no risk to our cattle station neighbours</b>	<b>Control fire</b> <ul style="list-style-type: none"> <li>a. Plan to avoid burning open grasslands</li> <li>b. Where possible establish fire breaks between neighbouring properties</li> </ul>	<i>Plenty of grass, year-round</i>
<b>Keep new weeds out of our country Control weeds that are already here and stop them spreading</b>	<b>Control weeds</b> <ul style="list-style-type: none"> <li>a. Annual surveillance for WONS weeds</li> <li>b. Eradicate, or control/contain and monitor, outbreaks of WONS weeds</li> </ul>	<i>Our grasslands are clean, free from woody weeds</i>





Target/Goals	Actions	Indicators
<b>Governance</b>		
<b>All families working together</b>	<b>Continue IPA facilitated land management planning</b> <ul style="list-style-type: none"> <li>a. Bring broader TO group together every five years to revise the IPA Plan of Management</li> <li>b. Work with neighbouring Indigenous groups for more coordinated delivery of Land and Sea Management in the Gulf region</li> </ul>	<i>All clan groups represented on the IPA Management Committee</i>
<b>Making better decisions for our country</b>	<b>Establish IPA Management Committee</b> <ul style="list-style-type: none"> <li>a. Meet twice yearly</li> <li>b. Ensure a minimum of 5 clan groups are represented</li> </ul>	<i>The IPA Steering Committee meetings are held at least twice yearly and successful</i>
<b>Having an IPA and supporting our rangers</b>	<b>Dedicate the Waanyi Garawa IPA</b> <ul style="list-style-type: none"> <li>a. Submit Plan of Management to the Australian Government</li> </ul>	<i>IPA is endorsed by the Land Council and dedicated</i>
<b>Being part of a Gulf region company for Indigenous land and sea management</b>	<b>Advocate for and join in a Southern Gulf Regional Land and Sea Management Hub</b>	<i>Waanyi and Garawa members on Board of Southern Gulf Land and Sea Management Corporation</i>

## Appendix 2:

### Weed Management on the Ganalanga-Mindibirrina IPA

#### Weeds found on, or weeds with a high risk of invading, the Waanyi Garawa Aboriginal Land Trust, with suggested control strategies

This table shows **Northern Territory Declared Weeds** and gives their Classes:

**A** (*To be eradicated*), **B** (*Growth and spread to be controlled*), and **C** (*Not to be introduced to the Territory*).

It also shows Australian Government declared **Weeds of National Significance** (WONS) and provides a rating; **High**, **Medium** or **Low**, based on a review of how particular weeds affect NT Indigenous communities.

#### Control Strategies for target weeds

##### Red

**Risk Weeds:** Know these plants and look for them. If found eradicate wherever possible, notify NT Weed Management Branch 8999 4567.

##### Orange

**Target weeds:** Know these plants, monitor areas where they have been found, manage (control and contain) infestations.

##### Yellow

**Nuisance weeds:** Only control these weeds where necessary, i.e. control at outstations.

Common Name	Scientific Name	NT Status	National Status	Smith (2001)	Notes
Mesquite	<i>Prosopis limensis</i>	A and C	WONS	High	Serious weed, to be confirmed on ALT
Prickly Acacia	<i>Vachellia nilotica</i>	A	WONS	High	Serious weed, to be confirmed on ALT
Rubber Vine	<i>Cryptostegia grandiflora</i>	C	WONS	High	Recorded adjacent to ALT in Qld Serious weed of waterways
Bellyache Bush	<i>Jatropha gossypifolia</i>	A, B and C	WONS	High	Present on ALT Serious invasive weed
Parkinsonia	<i>Parkinsonia aculeata</i>	B and C	WONS	High	Present on ALT



## Weed Management on the Ganalanga-Mindibirrira IPA continued

Common Name	Scientific Name	NT Status	National Status	Smith (2001)	Notes
Candle Bush	<i>Senna alata</i>	B and C		High	Present on ALT
Grader Grass	<i>Themeda quadrivalvis</i>	B		High	Recorded from ALT Serious grassy weed of savanna woodlands
Blue trumpet vine	<i>Thunbergia grandiflora</i>	Undeclared		High	Present on ALT, serious weed, waterways and wetlands
Caltrop	<i>Tribulus cistoides</i>	B and C		High	Present on ALT
Rubber Bush	<i>Calotropis procera</i>	B and C		High	Present on ALT
Castor Oil Plant	<i>Ricinus communis</i>	B and C		High	
Gamba Grass	<i>Andropogon gayanus</i>	A and C		High	
Mimosa	<i>Mimosa pigra</i>	A, B and C	WONS	High	



## Weed Management on the Ganalanga-Mindiberrina IPA continued

Common Name	Scientific Name	NT Status	National Status	Smith (2001)	Notes
Noogoora Burr	<i>Xanthium occidentale</i>	B and C		High	Present on ALT
Star Burr	<i>Acanthospermum hispidum</i>	B and C		High	Present on ALT
Khaki Weed	<i>Alternanthera pungens</i>	B and C		High	Present on ALT
Buffel Grass	<i>Cenchrus ciliaris</i>	undeclared		High	Present on ALT
Hyptis	<i>Hyptis suaveolens</i>	B		High	Present on ALT
Mission Grass	<i>Pennisetum polystachion</i>	B and C		High	Present on ALT
Mossman River Grass	<i>Cenchrus echinatus</i>	B		Medium	Present on ALT
Mexican Poppy	<i>Argemone ochroleuca</i>	B		High	
Chinee Apple	<i>Ziziphus mauritiana</i>	A and C		High	
Coffee Bush	<i>Leucaena leucocephala</i>	undeclared		High	
Coffee Senna	<i>Senna occidentalis</i>	B and C		High	
Neem	<i>Azadirachta indica</i>	undeclared		High	
Guinea Grass	<i>Panicum maximum</i>	undeclared		High	
Lantana	<i>Lantana spp.</i>	B and C	WONS	Medium	
Ornamental Rubber Vine	<i>Cryptostegia madagascariensis</i>	A and C		Medium	



## Appendix 3:

### Important Weed groups in the South Western Gulf

- 1. Grassy weeds** are possibly the most significant environmental weed threat in the southwest Gulf. Most are introduced pasture species, such as buffel grass *Cenchrus ciliaris*, couch grass *Cynodon dactylon* and grader grass *Themeda quadrivalvis*. Others such as mission grass *Pennisetum polystachion* have no agricultural value but likewise have broadly invaded Australia's northern savannas. These plants are difficult to control; most have windborne seed and are promoted by fire and the activities of feral animals. Although currently only found in the humid Top End, Gamba grass remains a promoted grazing species and as such could eventually become naturalised in the Gulf. Gamba grass is an insidious weed. Forming tall dense stands, and, curing late in the dry-season, it vastly increases fuel loads and in consequence promotes severe wildfires that alter the structure and diversity of northern woodlands. Intense wildfire associated with Gamba grass and other grassy weeds can significantly increase the risk to lives, property and the ecology in affected areas. A minor outbreak (approximately 10 plants) of Grader Grass was reported and controlled on the Land Trust in 2009. Recent surveillance found no plants at the location.
- 2. Hardy exotic shrubs** such as parkinsonia *Parkinsonia aculeate*, mesquite *Prosopis spp.*, prickly acacia *Vachellia nilotica subsp. indica*, mimosa bush *Acacia farnesiana*, calotrope (also known as Rubber Bush) *Calotropis procera* and bellyache bush *Jatropha gossypifolia* all represent significant potential problems on heavier (productive) soils, especially where they are protected from regular fire. Encroachment of woody natives, specifically coolibah *Eucalyptus microtheca*, whitewood *Endospermum medullosum* and gutta percha *Excoecaria parvifolia* may also be an issue on black-soil plains with agricultural potential.
- 3. Introduced low shrubs or forbs** such as Noogoora burr *Canthium pungen*, hyptis *Hyptis suaveolens* and sicklepod *Senna obtusifolia* and *S. tora* may be an issue as they spread rapidly, promoted by grazing (and feral animals) and reduced prevalence of fire. These highly invasive weeds are a threat to native plant communities, reduce the lands' potential and compromise human amenity. Mexican poppy *Argemone ochroleuca*, a highly invasive weeds often colonising seasonal creeklines, is known from nearby river catchments including the McArthur, Calvert and Settlement Creek. Khaki weed *Alternanthera pungens* and Star burr *Acanthospermum hispidum* are nuisance plants that have established around outstations and along some tracks within the Land Trust.
- 4. Potential environmental weeds** includes plants that can 'jump the fence'. These are species grown as shade trees, garden plants or ornamentals that could escape and become weeds in the bush. Examples include: the neem tree *Azadirachta indica*; chinee apple *Zizyphus mauritiana*; and creeping lantana *Lantana montevidensi*.

## Appendix 4:

### Threatened, rare and notable Wildlife of the Ganalanga-Mindibirrira IPA

This table is ordered with the most endangered wildlife species listed (in red) at the top.

Two standard recommendations are made:

- 1. Potential for survey** – there is an urgent need to find out if these species still occur in the IPA, and where they do, put in place good management strategies.
- 2. Monitor using Cybertracker** – these species are of interest for a variety of reasons including their cultural importance. By using Cybertracker to systematically collect records of these animals from the IPA we will gain a better understanding of their distribution and health of populations.

Common Name	NT Status	National Status	Notes
Carpentarian Rock-rat	Critically Endangered	Endangered	Not recorded from the IPA but occurs on nearby Woollagorang STN Potential for survey
Northern Quoll	Critically Endangered	Endangered	Historically known from the area but possibly now extinct in the southern Gulf. Potential for survey
Carpentarian Antechinus	Endangered	Vulnerable	Known only from this area but not yet found on the IPA. Potential for survey
Carpentarian Grass-wren	Endangered	not listed	Known from nearby Caranbirini Conservation Reserve and Lawn Hill National Park Potential for survey
Gouldian Finch	Endangered	Endangered	Historically recorded in the IPA. Large decline in this species across its range, may now have disappeared from the southern Gulf Potential for survey
Gulf Snapping Turtle	Least Concern	Endangered	Very restricted distribution and may have declined as a result of cane toads. More information is required. Potential for survey
Red Goshawk	Vulnerable	Vulnerable	Not recorded from the IPA. Large decline in this species in the Gulf and Kimberley regions due to the effect of fire on riparian forests. Potential for survey
Australian Bustard	Vulnerable	not listed	Common on heavy clay plains within the W/G Land Trust. Monitor using Cybertracker
Emu	Vulnerable	not listed	Now rare in this region, TOs suggest numbers have increased with better fire management in the IPA in recent years. Monitor using Cybertracker





### Threatened, rare and notable Wildlife of the Ganalanga-Mindibirrina IPA continued

Common Name	NT Status	National Status	Notes
Floodplain Monitor	Vulnerable	not listed	Handful of recent sightings in and near the IPA. May be recovering, cane toad affected. Monitor using Cybertracker
Merten's Water monitor	Vulnerable	not listed	Known from the IPA but likely to have undergone a large decline due to cane toads. Monitor using Cybertracker
Plains Deathadder	Vulnerable (pending)	not listed	Declining, possibly affected by cane toads. Predicted range falls within the IPA. Survey black-soil habitats in IPA
Mitchell's Water monitor	Vulnerable (pending)	not listed	Declining, cane toad affected species. Status in the IPA unknown, suitable habitat throughout the W/G Land Trust.
Northern Nailtail Wallaby	Near Threatened	not listed	Action Plan for Australian Marsupials and Monotremes – Recovery Outline – Nailtail Wallaby. Monitor using Cybertracker
Spectacled Hare-wallaby	Near Threatened	not listed	Action Plan for Australian Marsupials and Monotremes – Recovery Outline – Spectacled Hare-wallaby. Monitor using Cybertracker
Purple-crowned Wren	Near Threatened	not listed	Occurs in limited suitable habitat within the Land Trust, habitat adversely impacted by fire and feral animals – good species to monitor
Pictorella Mannikin	Near Threatened	not listed	Recorded from the Land Trust in recent years, fire & feral grazing implicated in general decline. Monitor using Cybertracker
Buff-sided Robin	Near Threatened	not listed	Population trend – declining; specialist riparian/vine-thicket species vulnerable to habitat degradation through grazing and fire. Monitor using Cybertracker
Bush Stone-curlew	Near Threatened	not listed	Population trend – declining; ground nesting insectivore vulnerable to cat predation and altered fire regimes. Monitor using Cybertracker
Long-haired Rat	Near Threatened	not listed	Population trend – declining
Western Chestnut Mouse	Near Threatened	not listed	Population trend – declining

**Threatened, rare and notable Wildlife of the Ganalanga-Mindibirrinda IPA continued**

Common Name	NT Status	National Status	Notes
Hosmer's Skink	not listed	not listed	Major declines in this and related rock-haunting skinks throughout northern Australia over the past two decades, status uncertain but possibly locally extinct. Potential for survey
Purple-necked Rock Wallaby	not listed	not listed	The only NT records for this wallaby are within the IPA, the species status overall is uncertain and its NT status is unknown. Species to monitor and potential for survey
Spectacled Hare-wallaby	not listed	not listed	Possibly present in north of Land Trust. Spinifex inhabiting species sensitive to over-burning. Monitor using Cybertracker
Rock Ringtail	not listed	not listed	Occurring on the Land Trust at the southern limit of the species distribution. Vulnerable to fire and cats. Monitor (record presence of scats) using Cybertracker
Orange leaf-nosed bat	not listed	Lower Risk	A rare and distinctive bat known from caves nearby in Qld. Listed as Vulnerable in Queensland. Potential for survey
Ghost bat	not listed	Lower Risk	A distinctive and rare cave-bat known from Lawn Hill NP (Qld). Listed as Vulnerable in Queensland. Potential for survey
Painted honeyeater	vulnerable	not listed	Found adjacent to the Land Trust (Qld) Rare woodland honeyeater. Potential for survey



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