



KOOLAN IRON ORE

QUARANTINE MANAGEMENT PLAN

KOOLAN IRON ORE MINE AND PORT FACILITY Kimberley, WA

MGX-HSEC-KI-PLN-327

EPBC 2006/2522 and EPBC 2022/09392
Ministerial Statement 715

Declaration of accuracy

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Signed



Full Name

Peter Kerr

Organisation


Koolan Iron Ore Pty Ltd

Date

20/10/2025

Koolan Iron Ore – ABN 87 099 455 277

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Preliminary - This document was initially produced for Aztec Resources by Ecologia. Mount Gibson Iron Limited acquired Aztec Resources in 2007 and has updated this plan as required by its commitments under the *EPBC Act* and Ministerial Statement 715. The current proponent is Koolan Iron Ore Pty Ltd, a wholly owned subsidiary of Mount Gibson Iron Limited.

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TABLE OF ABBREVIATIONS

C&M	Care and Maintenance
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DMPE	Department of Mines, Petroleum and Exploration
DPaW	Department of Parks and Wildlife (former)
DPIRD	Department of Primary Industries and Regional Development
DWER	Department of Water and Environmental Regulation
EPA	Environmental Protection Authority (Western Australia)
HSEC MS	Health, Safety, Environment and Community Management System
HST	Health, Safety and Training
KIOP	Koolan Iron Ore Project
MGX	Mt Gibson Iron Ltd
NQMP	Northern Quoll Management Plan
OEMP	Operations Environmental Management Plan
PFSO	Port Facility Security Officer
QMP	Quarantine Management Plan
WONS	Weed of National Significance

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1. INTRODUCTION

1.1. Purpose

This Koolan Island Quarantine Management Plan (QMP) describes the current management strategies employed by Koolan Iron Ore Pty Ltd (KIO), a wholly owned subsidiary of Mount Gibson Iron Limited (MGX) to mitigate the risk of quarantine related incidents on the health and population of flora and fauna endemic to Koolan Island and the supporting ecosystem. Koolan Island hosts assemblage of flora and fauna including rare and endangered species such as the Northern Quoll (*Dasyurus hallucatus*) which is particularly vulnerable to feral predators and the introduction of cane toad.

The QMP (this Plan) has been prepared to meet requirements detailed in the Western Australia's (WA) Minister for Environment's Statement of approval (Ministerial Statement 715) condition 11. This Plan has also been prepared to meet requirements under condition 3 of the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval 2006/2522 and 2022/9392 (condition 7) issued in 2025.

1.2. Scope

The QMP is a risk-based document. A risk assessment of environmental aspects associated with the Koolan Iron Ore Project (KIOP) as they relate to Quarantine on the Island is included in this document. The outcomes of the risk assessment are used as the basis for management strategies presented in this document.

This plan is applicable to all environmental processes and personnel (employees, contractors / suppliers and visitors). When applied and practiced this plan will assist to satisfy the requirements of:

- The Mount Gibson Iron HSEC system and standards;
- The Koolan Island Operational Environmental Management Plan;
- All environmental approvals and licensing requirements of the project;
- All other legal and compliance requirements related to quarantine for the project; and
- To ensure the key environmental aspects and risks associated with the project are mitigated in such a way that meets the business's objectives and environmental policy.

Operating procedures associated with this Plan are reviewed on an two yearly basis and where significant changes to the operation require a review of controls. This ensures a process of continuous improvement is applied and that current best practice is followed. When required this Plan will be modified and sent to the regulator for review outside of the required 4-yearly review period.

This QMP is relevant to the life of the operational phase of KIOP.

This document is intended to be used as a management document for KIOP while satisfying the objectives of Condition 11 in the Ministerial Statement 715, Condition 3 of the EPBC Act approval 2006/2522 and Condition 7 of EPBC 2022/9392.

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1.3. Key Objectives and Performance Indicators

The objective of this document is to provide a management framework to prevent the movement of non-endemic flora and fauna species between the mainland and Koolan Island and to control the spread of weeds present on the Island. This document also presents a monitoring program and contingency actions to be initiated should threatening agents such as introduced pathogens, cane toad or declared weed species or other pests be detected. The Plan has been developed to facilitate compliance with environmental obligations including local, state and Commonwealth regulatory requirements for quarantine and biosecurity.

Approval Conditions:

<p>Western Australia Environmental Protection Authority (EPA) Western Australia approval:</p> <p><u>Ministerial Statement 715</u> Condition 11: Manage the environmental impacts concerning introduced flora and fauna species that arise from the implementation of the proposal to:</p> <ul style="list-style-type: none"> • Prevent the spread of existing introduced flora and fauna species within Koolan Island and between the island and the mainland; • Prevent further establishment of existing introduced or new flora and fauna species on Koolan Island as a result of mining; and • Control or eradicate introduced flora and fauna species on Koolan Island. <p>Performance over time shall be measured by:</p> <ul style="list-style-type: none"> • The number of weed species present on the Island; • The increase or decrease in distribution of weed species on the Island; • The population and health of Northern Quoll on the Island; and • The presence or absence of feral fauna on the Island.
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Commonwealth

Environmental Protection and Biodiversity Conservation Act 1999 (Cth) approval:

EPBC Approval 2006/2522

Condition 3:

The person taking the action must adopt and implement the approved Quarantine Management Plan, prepared for Aztec Resources Limited by ecologia Environment and dated 24 May 2006.

Combined with the other related conditions in relation to parts of the QMP for reporting and reviewing this Condition requires KIO to implement the approved plan across Koolan operations.

Condition 4:

In the event that new individuals or populations of introduced flora or fauna are identified on Koolan Island, the Department must be consulted, along with the WA agencies mentioned in Section 7.0 Contingencies of the Quarantine Management Plan and included in the development process of any response actions deemed necessary by all relevant agencies in consultation.

Condition 6:

If the person taking the action wishes to carry out any activity otherwise than in accordance with the plans, programs or measures referred to in paragraphs 1 to 4, the person taking the action may submit for the Minister's approval a revised version of any such plan, program or measure. If the Minister

approves a revised plan, program or measure so submitted, the person taking the action must implement that plan, program or measure instead of the plan, program or measure as originally approved.

EPBC 2022/9392

Condition 7:

To avoid and mitigate harm as a result of the Action on protected matters, the approval holder must commence implementing the Quarantine Management Plan no later than the commencement of the Action and continue to implement the Quarantine Management Plan at least until the expiry date of this approval.

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1.4. Mining Operations Overview

Koolan Island is located 130 km northeast of Derby at the northern end of the Yampi Peninsula (Yampi Sound), off the Kimberley coast of Western Australia (Figure 1). It is separated from the mainland by a 1 km wide channel. A description of the environment is included in Appendix B.

KIOP comprises a conventional open cut mining operation with ore extraction occurring below sea level in Main Pit. Production is supported by dewatering operations; a port facility with berthing and ore loading capability for bulk ore carriers; and a crushing and screening plant. Ancillary infrastructure includes an accommodation village, an airstrip, mobile plant workshops, administration offices with crib rooms, laboratory, bulk fuel facilities, landfill, bioremediation facility, wastewater treatment plant, diesel power generators and bore-fields for raw and domestic water supply. There are no public persons on Koolan Island.

Koolan Island has a federally controlled port regulated under Commonwealth laws and managed under the Kimberley Ports Authority. The port and ore-loading facility routinely services foreign owned bulk iron carriers and management of risk of potential invasive marine pests is a key facet of Quarantine management. All logistics is managed by MGX and contractors to deliver material and equipment to the Island to support the operation. Transport of materials is through a transport barge service from either Derby or Broome while smaller items are delivered by air. Domestic quarantine management is focussed on ensuring quarantine barriers are in place between Derby and Broome Ports and Koolan Island Port.

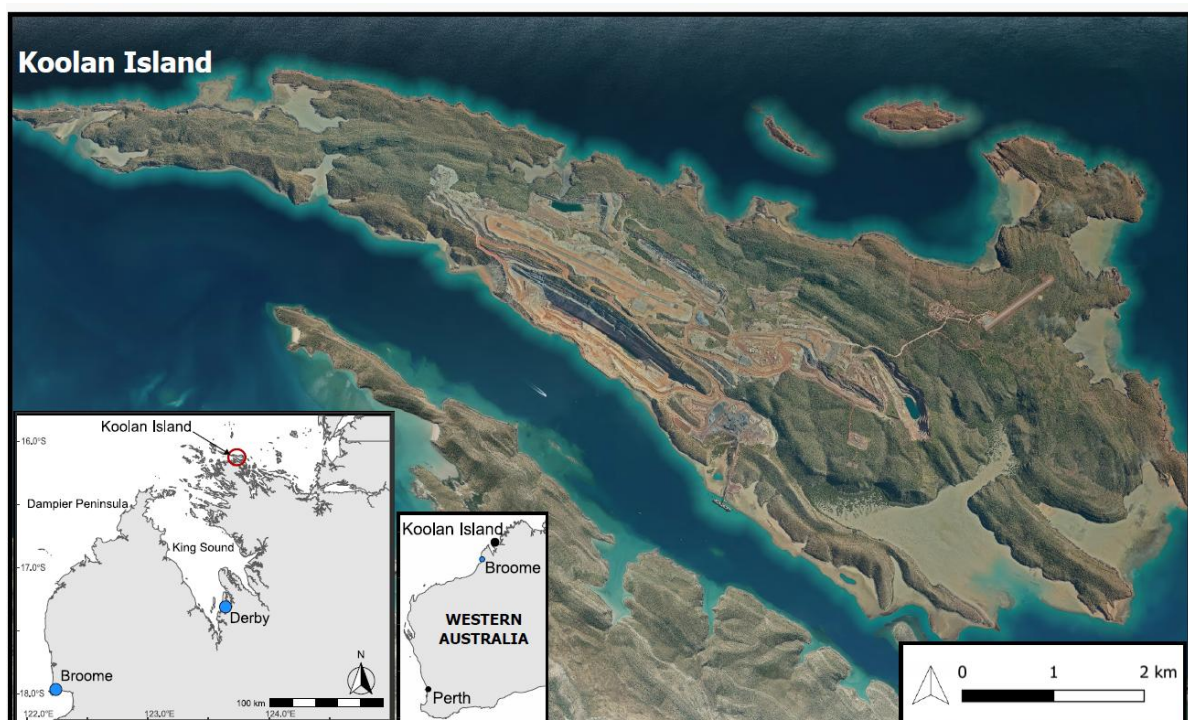


Figure 1: Locality Map of Koolan Island.

KIOP was previously managed by Aztec Resources between 2003 and 2006. The Koolan Island Iron Ore Mine and Port Facility proposal was originally assessed by the Environmental Protection Authority (EPA) under Part IV (S45) of the *Environmental Protection Act 1986* in 2005. Ministerial approval with conditions was granted to the proponent Aztec Resources on 22 February 2006 under Ministerial Statement 715 (MS715) and associated Management Plans. The project was also assessed under the

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Environmental Protection and Biodiversity Conservation Act 1998. Approval was granted in 2006 under EPBC 2006/2522. Recent approval was also granted for an additional Action under 2022/9392.

Construction and commissioning of Mine Infrastructure and the Port Facility was also completed under MS715 in 2007 and associated works approvals under Part V of the *Environmental Protection Act 1986*. The operation is currently licensed under Part V as prescribed premises (Licence L8148).

MGX is currently undertaking mining on Koolan Island on mining leases M 04/461 and M 04/417 in accordance with a variety of approved Mining Proposals from the Department of Mines, Petroleum and Exploration (DMPE).

1.5. Existing Environment

A detailed description of the existing environment including flora and fauna, heritage, geography, geology, hydrology and flora and fauna is provided in Appendix B.

The main body of this document focuses specifically on the management of risk as it applies to the key objectives outlined in Section 1.3.

1.6. Associated Management Plans

The QMP represents one of several Management Plans that are required under Ministerial Statement 715, EPBC 2006/2522 and EPBC 2022/9392. In addition to the QMP, the following management plans deal with quarantine and management of invasive flora and fauna on Koolan Island and support this document:

- Koolan Island Marine Management Plan (Mount Gibson Iron Ltd., 2015)
- Koolan Island Northern Quoll Management Plan (Mount Gibson Iron Ltd., 2011)
- Koolan Island Significant Fauna Species Management Plan (Mount Gibson Iron Ltd., 2012a)
- Koolan Island Significant Flora Species Management Plan (Mount Gibson Iron Ltd., 2012b)
- Koolan Island Operations Environment Management Plan (Mount Gibson Iron Ltd., 2020)

Operational procedures are developed and applied at Koolan Island to support the commitments made within this and the above documentation (Appendix A).

1.7. Threat Abatement Plans

Threat Abatement Plans (TAPs) have been developed by DCCEEW to establish a national framework to guide and coordinate Australia’s response to threats to biodiversity, and identify research, management and other priority actions required to protect threatened species. TAPs of relevance to the project are presented in Table 1.

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Table 1 Threat Abatement Plans

Threat Abatement Plan	Goal and Objectives	Relevant quarantine management consideration
Threat Abatement Plan for the Biological Effects, including Lethal Toxic Ingestion, Caused by Cane toads (DSEWPaC 2011)	<ul style="list-style-type: none"> Identify priority native species and ecological communities at risk from the impact of cane toads; Reduce the impacts of cane toads on populations of priority native species and ecological communities; and Communicate information about cane toads, their impacts and this TAP. 	Northern Quoll, Ghost Bat and other terrestrial fauna species.
Threat Abatement Plan to Reduce the Impacts on Northern Australia's Biodiversity by the Five Listed Grasses (DSEWPaC 2012)	<p>The TAP aims to minimise the adverse impacts of the five listed grasses on affected native species and ecological communities through the following objectives:</p> <ul style="list-style-type: none"> Develop an understanding of the extent and spread pathways of infestation by the five listed grasses; Support and facilitate coordinated management strategies through the design of tools, systems and guidelines; Identify and prioritise key assets and areas for strategic management; Build capacity and raise awareness among stakeholders; Implement coordinated, cost-effective on-ground management strategies in high-priority areas; and Monitor, evaluate and report on the effectiveness of management programs. 	Flora and vegetation and terrestrial fauna species (including threatened species).
Threat Abatement Plan for Predation by Feral Cats (DoE 2015)	<p>The TAP aims to minimise the impact of feral Cats on biodiversity by protecting affected threatened species and preventing further species and ecological communities from becoming threatened. Specific objectives include:</p> <ul style="list-style-type: none"> Effectively control feral Cats in different landscapes; Improve the effectiveness of existing control options for feral Cats; Develop or maintain alternative strategies for threatened species recovery; and Increase public support for feral Cat management and promote responsible Cat ownership. 	Northern Quoll, Ghost Bat and other terrestrial fauna species.
Threat Abatement Plan for predation by the European red fox (DEWHA 2008).	<ul style="list-style-type: none"> Prevent foxes occupying new areas in Australia and eradicate foxes from high-conservation-value 'islands'; Promote the maintenance and recovery of native species and ecological communities that are affected by fox predation; Improve knowledge and understanding of fox impacts and interactions with other species and other ecological processes; Improve the effectiveness, target specificity, integration and humaneness of control options for foxes; and Increase awareness of all stakeholders of the objectives and actions of the TAP, and of the need to control and manage foxes. 	Northern Quoll, Ghost Bat and other terrestrial fauna species.

1.8. HSEC Management System Standard

As stated above, MGX has a series of environmental standards that require MGX operations to provide outcomes in environmental performance and management of risk. The environmental standards reside

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under a series of Health, Safety, Environment and Community Management Standards (HSEC MS). Quarantine Management is Standard 4.7 in the series and is included below:

4.7.1. A risk-based approach will be used for the management of quarantine. Where determined necessary, the sites, will develop, plans, systems and protocols, to manage quarantine issues aimed at ensuring native flora and fauna on MGX mine sites are not compromised by the introduction of non-endemic (introduced) species, through the mining process.

The following minimum criteria will be used by the sites to develop those plans and systems:

- a) Ensure quarantine management is considered in MGX's risk management strategy;*
- b) Where required, develop and implement a Quarantine Management Plan;*
- c) Regular and ongoing monitoring of sites to determine if existing introduced, flora and fauna are spreading and if new species have been introduced.*
- d) Identify the vectors with potential to carry introduced species to mine sites, and define potential mitigation strategies;*
- e) Implement agreed actions to prevent the spread of any existing introduced flora and fauna species on the sites;*
- f) Implement agreed actions to prevent the establishment of new introduced flora and fauna species on the sites.*

It is noted that in relation to point b above, that for Koolan Island a Quarantine Management Plan (this plan) is required under EPBC approval requirements.

1.9. Limitations

There exist certain limitations in relation to this management plan in relation to the use of monitoring data, survey work and controls.

Key limitations include:

- Field weed survey data only represents as small proportion of land area and does not cover full width of area.
- Introduced species introduction through natural vectors controls
- Ability to control weeds outside of approved project areas
- Access to areas to properly survey or conduct control operations such as surveillance, trapping or weed control due to topography and lack of safe access.
- Resourcing to implement controls outlined within this plan

The above limitations pose a varying degree of risk based on the potential long-term impacts, these risks outline the limitations to controls or uncertainty of information which can lead to plan failure. Further details on each limitation are below:

- Field weed surveys are conducted in selected areas based on accessibility, safety and potential risk factors for weeds in these areas. This proportion surveyed however is limited by time and cost of survey to a small proportion of the island total area. As such, modelling and new technology (such as aerial/spatial imagery is being utilised to support field surveys and to minimise this risk to cover a larger area (whole of island approach).
- Natural vector introduction of weeds is of low risk based on the island location and minimal interactions however birds introducing seed and movement within the island of seed

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increasing spread of weeds has been known to occur and is shown through the spread of *Passiflora* on the island through northern quoll movements.

- Natural vector introduction of fauna, such as cane toads poses a high risk and controls within this plan are unable to fully eliminate this risk. The potential impact on site species is outlined as a significant risk.
- Weeds are well known to have a source from the previous tenants on the island (BHP) and to occur from a key source known as the BHP townsite. While weed control does occur in areas outside of the approved project boundaries to minimise the spread and distribution, some of these areas are inaccessible for suitable weed control techniques as well as feasibility to continue weed control over areas outside of the boundary. Movement and spread of weeds remains a significant risk to ongoing rehabilitation and control works.
- Area access; controls for weeds and introduced fauna are dependent on accessibility and identification. However Koolan Island’s landscape prevents access in some areas due to slope, stability and geology. As such some areas are unable to be utilised for survey or have weed control completed in a safe manner. This can lead to areas of additional source material for further weed spread or areas of habitat for introduced species not being identified.
- Resources remain at a high level to conduct the operations and controls outlined in this QMP. However, this may change as the operations cease and change from mining to closure and rehabilitation focus. This may be a limitation in the future. This is mitigated through the commitments and controls outlined in this plan.

Mitigation of the above is addressed through the controls in this plan to minimise risk as much as feasibly possible.

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2. KEY THREATS

2.1. Potential Vectors

As outlined in Section 1.7, the key vectors (pathways) for the entry of introduced and invasive flora and fauna species and pathogens on to Koolan Island include:

- Natural spread across the Island and across the 1km channel from the mainland;
- Accidental introduction due to mining related activities;
- Accidental introduction due to non-mine related activities (e.g. Tourism);
- Intentional introduction.

Each shall be treated separately and the risks of each considered in Section 3.0. While not a specific threat it is noted that the loss of species (i.e. Northern Quolls) through transport routes off the island is a potential occurrence.

2.1.1. Natural Spread

The natural spread of invasive species across the Island and from the mainland to the Island has been documented to occur due to fauna movement or movement of debris by tides.

Birds such as white cockatoo have been shown to spread Passion flower / *Passiflora* (*Passiflora foetida* var. *hispidula*) seed by consuming the fruit. Bats, Flying Foxes and Northern Quolls also rely on the fruit of the Passion flower as a major source of diet and have been shown to effectively spread the species through movement. Introduced pathogens could also be introduced through migratory birds.

Vegetative debris routinely washes up on the coastline of Koolan Island and could potentially carry weed seed and invasive fauna species including cane toad (*Rhinella marina*) as the species is now known from presence in the West Kimberley including areas around Derby and the Dampier Peninsula.

Weeds can also occur via wind spreading of pollen and seeds which can introduce species occurring on the mainland or nearby islands. Surface water flow can also assist in the spread of weeds down drainage lines and in low lying areas.

2.1.2. Accidental Introduction

The introduction of invasive species to Koolan Island may result from activities related to mining activity or be the result of human activity on the Island non-related to the operation and involving the general public. The main vector is marine transport to the Island, both domestic and foreign.

The introduction of marine pests from bulk iron ore carriers (foreign) is possible in the absence of quarantine control. Hull biofouling and ballast water are the two main vectors. The risk of marine pest introduction and management strategies is detailed in the Koolan Island Marine Management Plan but also considered in the Risk Assessment in Section 3.

The frequent movement between Derby and Koolan Island via barge vessels (domestic) and to a lesser degree the movement of persons and materials to and from the Island by air is considered a quarantine risk and co-managed by MGX Logistics and contracted transport carriers.

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While infrequent, informal visits to remote embayments and beaches on Koolan Island occur by tourists and members of the Traditional Owner group and can pose a potential pathway for the introduction of invasive species or spread of declared weed species from the Island. These visits may also occur off the mining lease but physically on the Island and therefore bypass normal quarantine procedures implemented by the operation.

2.1.3. Intentional Introduction

While highly unlikely, the intentional introduction of flora and fauna to Koolan Island is possible. The intentional release of cane toads on the Island would effectively be a form of environmental sabotage due to the potential impact of cane toad infestation on the Northern Quoll population.

Research into a potential introduction of a biological control for the control of Wild passionfruit/Passiflora is currently underway by CSIRO. This work considered the impacts to native flora and fauna and is under trial control conditions to prevent any unforeseen impacts from the introduction of a biological control. Laboratory testing of a biological control vector for *Passiflora foetida* is currently underway by CSIRO. Following the successful completion of this step, and field trials, this vector may be introduced at locations on Koolan Island. This will include a large range of consultation including with DCCEEW prior to any on-ground works. It is noted that the volume of weed species on the island is a direct impact from historically introduced species prior to 1993.

2.2. Introduced Flora

A number of weed species are listed on the Western Australian Organism List as Declared Pests by the Department of Agriculture and Food Western Australia (DAFWA) pursuant to section 22 of the *Biosecurity and Agriculture Management Act 2007 (BAM Act)* according to their threat to agriculture and the environment. The *BAM Act* Regulations were enacted on 1 May 2013 (DAFWA, 2013). Weeds are also classified as Weeds of National Significance (WoNS) if they pose a significant agricultural, forestry or environmental threat as stated by Department of Sustainability Environment Water Populations and Communities (SEWPAC, 2013 - now the Department of Climate Change, Energy, the Environment and Water).

The control of Declared Pests is guided by three control categories identified in the *Biosecurity and Agriculture Management Regulations 2013* (DAFWA, 2013). Declared Pests and Weeds of National Significance (WONS) found on Koolan Island are described in Table 2. Three species of declared pests are present on Koolan Island (Bellyache Bush, Candle Bush and Rubber Vine). Bellyache Bush and Rubber Vine are both listed as WONS (National Biosecurity Committee, 2016). An additional declared weed species, Rubber Bush (*Calotropis procera*) was identified at one location near the Port in 2014 but was destroyed. This species was located again in 2022 and was a focus of removal of the small number of individuals and ongoing inspections and survey work. Individuals are removed whenever located.

Seven species are listed as environmental weeds and are targeted as part of the two-yearly Weed Monitoring on Koolan Island (Table 2) and the annual spatial survey.

All of the declared weed species were described in the original Quarantine Management Plan (2006) and comprise weed species present on Koolan Island at the end of the BHP era of mining in 1993

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particularly around the old town site which was occupied between 1965 and 1993. The list of environmental weeds has increased over the years since weed surveys were initiated in 2006.

In 1995 the (now) Department of Parks and Wildlife (DPaW) undertook a biological inventory of Koolan Island. The inventory included the results of a flora survey conducted in 1993 which concentrated on the central and eastern portions of the island along roads, formerly inhabited areas and nearby creek lines. The inventory also included a compilation of historical flora records (Keighery et al., 1995). A total of 50 weed species were identified, principally occurring in the old BHP town site area (old town site).

From 1995 until present, a total of 95 species, sub-species and variants of described species of weeds have been recorded on Koolan Island during the monitoring undertaken by ecological and botanical consultants. In the majority of cases the weeds appear to be concentrated in and around the old town site and around areas of existing disturbance and historic sites rehabilitated by BHP, with minor outlying locations observed adjacent to tracks outside of these areas.

The distribution of listed weed species and the extent of individual meta-populations across the Island is monitored on an annual basis and the results submitted to the DWER and DCCEEW. The last Compliance Assessment Report (CAR) to DWER was submitted in September 2024 in relation to MS715, These reports are submitted annually. This information is submitted in the DCCEEW annual report on 1 July every year.

Management of weed species within the framework of quarantine includes containing weed populations across the Island, preventing the introduction of new species, preventing the transport of weed species off the island, monitoring, progressive rehabilitation of mining disturbance, collection of native seed, soil management protocols and where practicable¹ and safe to do so, mechanical and chemical control of weeds.

Table 2: Declared and Target Weed Species

Declared Species	Target Species
Bellyache Bush (<i>Jatropha gossypifolia</i>)	Mexican Lilac (<i>Gliricidia sepium</i>)
Candle Bush (<i>Senna alata</i>)	White Lead Tree (<i>Leucaena leucocephala</i>)
Rubber Vine (<i>Cryptostegia madagascariensis</i>)	Wild passionfruit / Passion flower (<i>Passiflora foetida</i> var. <i>hispida</i>)
Rubber Bush (<i>Calotropis procera</i>)	Giant Reed (<i>Arundo donax</i>)
	Hyptis (<i>Hyptis suaveolens</i>)
	Annual Mission Grass (<i>Cenchrus pedicellatus</i> subsp. <i>unispiculus</i>)
	African Tulip Tree (<i>Spathodea campanulata</i>)

¹ Where practicable relates to safe and practicable which includes heights, slopes, ease of access, movement of equipment, impacts of overspray etc

In response to the results of the 2022 Weed Survey, and as per Condition 4 of EPBC approval KIO provided an update to both DCCEEW and DWER (June 2023) on the presence of two new species. These were:

- *Ailanthus altissima* - one individual at the old BHP Townsite
- *Ixora ?coccinea* - two individuals at the old BHP Townsite

These two species are not declared species or considered a target species but had not been previously identified. These updates are required for any new introduced species.

In 2025 the presence of cane toads was also notified to the Department (and other regulatory bodies as required under Table 8).

Where there is evidence of a significant increase in weed presence, spread, emergence of new species, new declared species identified or a decline in control efficacy then control efforts including surveys and inspections will be scaled up accordingly to ensure timely identification and appropriate control response.

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2.3. Introduced Fauna

Observations and captures of introduced fauna have been recorded on the Island since BHP concluded mining in 1993. Prior to 2006 species recorded included the Singapore Ant (*Monomorium destructor*), introduced centipedes, earthworms and slugs were also recorded and common on the Island and mainland. The common snail (*Prosoppeas achatinaceu*) was recorded in 2005 but has never been recorded in subsequent snail surveys targeting short range endemic snails. No feral or introduced mammal species are known to be present on the Island.

The main targets of quarantine measures include amphibian species (cane toad (*Rhinella marina*)), mammal species (feral cat (*Felis catus*), rat (*Rattus rattus*), mouse (*Mus musculus*) red fox (*Vulpes vulpes*), European rabbit (*Oryctolagus cuniculus*), and reptiles i.e. Asian house gecko (*Hemidactylus frenatus*). Of the above species, only the European rabbit has been recorded on Koolan Island previously (not since mining recommencement in 2006), however these species have the potential to colonise and cause significant environmental impact.

KIO will maintain a register of introduced fauna and update on any new confirmed fauna sightings or surveillance results. This will be part of the site Fauna Register. Introduced Fauna awareness is conducted via inductions and other communications such as posters, pre-start meeting reminders, and ad-hoc awareness campaigns by the Environmental Department (Appendix C for examples). Based on the risk profile, the focus of the monitoring onsite and awareness is based around cane toads but opportunistic and survey work does include the scope to identify other species such as Asian house gecko, Singapore Ant and other introduced fauna species.

Surveys undertaken on site either targeted or for other activities such as pre-clearance, weeds or rehabilitation as well as opportunistic sightings or reports by staff are also used to help identify introduced fauna. Specific fauna surveys such as the land snail or blind snake searches assist as part of introduced fauna searches as well any targeted baiting (i.e. ants) or inspections (i.e. geckos).

Surveillance programs and opportunistic sightings help support identification of introduced fauna. No feral or introduced mammal species have been confirmed within KIOP timespan; however, work is being undertaken to ensure controls are available in case these are identified.

2.3.1. Cane Toads

Cane toads represent a key threat to native fauna on Koolan Island, in particular conservation significant species including the northern quoll and ghost bat. Cane toads are currently found in habitats across most of northern Australia, with the western frontier being recorded at Derby, Western Australia in 2022. These habitats range from sand dunes and coastal heath to the margins of rainforest and mangroves.

Cane toads occur in much higher densities and consume more prey than native frogs. Cane toads can prey on threatened invertebrate species such as the Koolan Island camaenid land snail (*Amplirhagada astuta*). The high consumption rate of invertebrates may also have an impact through competitive exclusion of other native invertebrate predators. On Koolan Island, this is particularly important as the Northern Quoll has been reported as having a high dependency on invertebrates as a prey source.

Beetles and cockroaches were the most abundant prey item recorded in the scats of the Northern Quoll on Koolan Island (Thomas, 2020) and beetles are reported as the dominant invertebrate prey item for the Cane toad.

Cane toads have the potential to compete with native species for shelter sites. During the dry season, in areas where cane toads are present, rock crevices that retain moisture for long periods of time can become so congested with refuging cane toads that no other fauna are able to occupy them.

Cane toads are generally only active at night; however, in areas where there is abundant moisture and during seasons of moderate weather, they make little effort to refuge during the day and can be

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observed in daylight hours sitting in heavily shaded puddles. In cold or dry weather, they shelter in moist crevices and hollows during the day, sometimes excavating depressions beneath logs, rocks and debris.

Cane toads can reach high densities in suitable habitat (over 2,000 individuals per ha). In recently colonised populations (less than two years old) they rapidly increase in number to levels far in excess of those in older established populations (DAWE 2020). There are no specific predators for cane toads that can prey on individuals without succumbing to their toxin.

Risk of colonisation and potential habitats

Establishment of a Cane toad population at Koolan Island relies on the ability to persist which includes survival, breeding and reproduction to establish an island population.

Cane toads may have arrived unassisted from the mainland, most likely from large river mouths following cyclone driven freshwater pulses. There are no specific predictable locations where these arrivals may occur, and the coastline of the island is extremely remote and inaccessible to personnel, making early detection of unassisted Cane toad arrivals difficult.

Cane toads reached Derby during the 2022/2023 wet season, therefore one of the key measures to assist in minimising the probability of transport to the island is a toad exclusion fence at the perimeter of the Derby freight yard. Exclusion fencing is likely the most effective way to reduce the potential for cane toads to “contaminate” freight prior to loading and subsequent delivery via barge to Koolan Island.

There are few suitable habitats for Cane toad in the undisturbed parts of Koolan Island. Key habitats for the year-round persistence of Cane toad at Koolan Island are permanent or near permanent water bodies. These potential habitats are present in the developed area in and around permanent water infrastructure. The lower reaches of Pindan Creek are a natural feature that has also been observed to have near permanent water following reasonable wet season conditions. Key habitats present on Koolan Island that may provide habitat to Cane toad are discussed in Table 3.

Table 3 Cane Toad potential habitat

Area	Reason
Open, disturbed or human-modified habitats close to water such as dams, ponds, around accommodation and buildings where taps or sprinklers are used or where surface water management infrastructure directs surface flow	Artificial water-sources or moisture, including sprinklers, leaking taps and air-conditions are known to attract cane toads
Waterbodies	Cane toads need to hydrate their bodies every few days, especially in drier landscapes (Alford et al. 1995). Surveys should include all available freshwater bodies in the area, including temporary water bodies. Saltwater is less suitable, but it is not a complete barrier to their dispersal. Cane toads are able to tolerate salinity of up to five per cent (15% seawater) and sometimes forage in brackish channels.

	However, they are unlikely to spend longer periods in mangroves or similar areas that are frequently inundated by saltwater (M Greenlees, pers. comm.).
Open corridors, such as roads, footpaths, tracks as well as other animal or human made tracks	Cane toads are found more often along corridors than in surrounding vegetation (Brown et al. 2006). Preliminary radio-tracking studies in Northern NSW showed cane toads never moved more than 2 to 3 metres into the denser ground cover next to such corridors (M Greenlees, pers. comm.). They are often found as roadkill.
Open areas that are lit at night, such as by security lights or floodlights	Artificial lights attract invertebrates on which cane toads feed.
Shelter sites such as crevices between rocks, hollows under large, live trees and leaf litter or dense vegetation on the ground, or drainpipes	Common shelter sites observed by Seebacher & Alford (2002), particularly for daytime or cold weather searches in areas immediately adjacent to freshwater.

2.3.2. Feral Cats

Feral Cats (*Felis catus*) became established in Australia soon after European settlement and now occur across 99.8% of the continent (DPIRD 2019). The species can inhabit all habitat types present within Australia, including forests, woodlands, grasslands, wetlands, and arid areas. This is a result of their opportunistic and generalist feeding behaviour as well as their ability to survive despite limited access to water (DoE 2015; DPIRD 2019)

The abundance of feral cats within a given habitat varies due to fluctuations in prey resources and habitat types (DoE 2015). These animals are generally solitary with the home ranges of same sex individuals not overlapping. While the average size of feral cat home ranges within the Kimberley is not known, home ranges in similar climatic areas in Australia indicate that the home ranges can range from 50-1,320 ha (Moseby et al. 2009). Cats do not have a defined breeding period but generally have two or three litters each year from about 8 months old and their average life expectancy is 5 years (DPIRD 2019).

Feral cats are known to have significant detrimental impact on many of the native mammals, birds, and reptiles, through direct predation, competition, and disease transmission. They are recognised as being a significant threat to Northern Quolls through direct predation and competition over shared prey species (Hill and Ward 2010). Feral cats have also been previously identified as a threat to Ghost Bats from predation; however, there is little direct evidence to support this (Bat Call 2021).

Feral cats are not known to occur on Koolan Island; however, this species can persist in varied habitats throughout the mainland, therefore no detailed habitat assessment of Koolan Island has been undertaken to determine suitability for Feral cats.

2.3.3. European Fox

The European Red Fox (*Vulpes vulpes*) was introduced as a result of European settlement. The species currently occurs across the majority of the Australian continent and have been recorded in various

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habitat types. The species is most abundant in both urban and lightly wooded habitat as these habitats offer a wide variety of shelter and food (DSEWPac 2010). Foxes are generalist hunters and are also known to scavenge food from other animals and humans.

Foxes are generally solitary animals during the non-breeding period, whilst in the breeding period they form breeding pairs or small groups consisting of one male and multiple non-breeding females. An individual or group generally has a home range of between 280-1,600 ha, with the actual size of these home ranges depending on local population densities and the availabilities of other resources (DPIRD 2018).

Foxes have been identified as having a detrimental impact on native Australian ground-nesting birds, small to medium sized mammals and some reptiles, such as green turtles (DSEWPac 2010). The species has been recorded as directly preying on Northern Quoll as well as competing with them for prey species, which has contributed to the decline of the species (Orell and Morris 1994). Foxes are not known to directly predate on Ghost Bats; however, they are known to compete with them for prey species, which can also result in the decline of local populations (TSSC 2016). While Foxes are not known to occur on Koolan Island, there is a high risk of species colonisation if not managed appropriately. Furthermore, given that Foxes are known to occur across the Australian mainland and predate on the Northern Quoll and compete with both the Northern Quoll and Ghost Bat, the species is considered a key quarantine consideration requiring management at Koolan Island, to ensure the protection of significant species and other fauna.

2.4. Potential Impacts

Koolan Island has an assemblage of flora and fauna that could be adversely affected by the introduction of exotic plants and animals. A number of conservation significant species occur on the island including the Northern Quoll (*Dasyurus hallucatus*).

Introduced flora species can modify a number of natural processes, resulting in:

- Displaced native flora;
- Inhibition of regeneration;
- Altered fauna resources;
- Effects on nutrient cycling;
- Changed fire regimes; and
- Decline of the invaded community

Introduced fauna species that establish themselves in natural ecosystems have the potential to impact on a number of natural processes, resulting in:

- Resource competition (i.e. space, water and food);
- Prevention of seedling recruitment;
- Alteration and damage to vegetation structure and composition;
- Soil erosion;
- Damage to watercourses;
- Genetic changes;
- Direct predation upon native fauna;
- Poisoning (i.e. ingestion of cane toads);

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- Changes to the abundance of native fauna;
- Transmission of diseases; and
- Genetic changes.

Implementation of quarantine measures as described in this management plan, are to ensure the impact of mining on the biodiversity of Koolan Island is minimised. The management of exotic marine species is also addressed in the Marine Management Plan (Mount Gibson Iron Ltd., 2015).

3. MANAGEMENT OF RISK

3.1. Environmental Risk Register

An Integrated HSEC Risk Register is maintained for all mining related activities on KIOP mining lease and tenements in accordance with internal standards for risk management². The purpose of this register is to identify key risks associated with mining activities and assess the significance of their impacts to health, safety, environment and the community. The Senior Site Executive in consultation with the relevant manager will approve any changes to the site risk register. A significant risk register is maintained to keep record of extreme and significant level risk scenarios with the potential to cause serious impact to the environment. Quarantine is considered within the significant risk register due to the potential for severe environmental impact and public interest.

The risk register will be reviewed on a quarterly basis and will also be reviewed in response to incidents, changes in legal requirements, findings of inspections and audits and management reviews. The risk register is maintained in the MGX online risk database available on the company intranet. A hard copy of the register is also maintained in the KIOP main conference room.

At a task level personnel must use a Job Hazard Analyses (JHA) or equivalent to identify potential risks and determine control measures to reduce risk to acceptable levels.

3.2. Quarantine Risk Assessment

The management of potential impacts associated with mine related activities on KIOP are based on a risk management framework applied under internal standards for risk management. This involves the identification of activities that can result in impacts to the Koolan Island environment, identifying and implementing cost effective controls to reduce the risk and monitoring the effectiveness of selected controls.

A quarantine risk assessment has been conducted in accordance with the risk management standard. The level of risk was arrived by identifying a potential threat or event and then determining the most reasonable consequence of the event being realized and the likelihood of that event occurring to arrive at a risk score as provided by the risk matrix in Table 4. The classification of the resultant risk and level of management intervention required is shown in Table 5. The results of the assessment are provided in Table 6. Controls listed below constitute management commitments that are implemented at KIOP.

The key areas relevant to this QMP and reflected in the risk assessment include:

- Weed Management
- Fauna Management
- Marine Management
- Contractor Management

² MGX HSEC Management Standard: Standard 1.2 Risk Management (Mount Gibson Iron Ltd., 2013a)

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Management of quarantine risk is focussed on four areas of activity applied on Koolan Island:

1. Prevention: Through quarantine checks and inspections as well as Government enforcement is the preferred and most effective management measure;
2. Eradication: Where possible, eradication of known populations of select species is preferred once established however it is unlikely that any species present is eradicable;
3. Containment: Restriction of movement of vehicles and machinery across the Island and site quarantine procedures to prevent internal spread and translocation to the mainland;
4. Asset-based protection: focus management of weeds on topsoil stockpiles and rehabilitation and monitoring of marine environment and undisturbed areas of the Island.

Table 4: Consequence and Likelihood Matrix

RISK MATRIX <i>Use this Risk Matrix to determine the Level of Risk for each Hazard</i>						
PROBABILITY		CONSEQUENCE				
		1. Insignificant First Aid Low impact confined spill 1 hour production loss	2. Minor MTI / RWI Low impact and easy clean up by site 1 shift lost	3. Moderate LTI Moderate impact within lease boundary < 7 day loss	4. Major Multiple LTI's Major impact with significant clean up >7 but < 1 month loss	5. Catastrophic Fatality / Permanent Disability Severe impact with extensive clean up > 1 month lost
A	Almost certain: Expected to occur in most circumstances (Once per week).	15	10	6	3	1
B	Likely: Will probably occur in most circumstances (Once Per Month).	19	14	9	5	2
C	Possible: Has occurred in the past (Once Per Year).	22	18	13	8	4
D	Unlikely: Known to have occurred on occasion (Once in ten years).	24	21	17	11	7
E	Rare: May occur in exceptional circumstances (Once in 100 years).	25	23	20	16	12

Table 5: Risk Levels and examples of response actions

Risk Level	Priority	Example Risk Response Action
Extreme	1	Detailed research and planning required; determine whether activity or task should be stopped pending further investigation
Significant	2	Senior management attention; immediate corrective and preventative action required
Moderate	3	Management responsibility assigned; corrective and preventative action plan developed
Low	4	Manage by routine procedures; accept risk



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Table 6: Quarantine Risk Assessment of Project Activities and Potential Impacts on the Koolan Island Environment

Project Activity	Risk	Potential Impacts	Inherent Risk	Management Measures	Residual Risk
Quarrying of construction sand for KI	Contaminated quarry sand /quarry machinery transport including pathogens (i.e. myrtle rust), plant seeds and weeds, insects (including fire and Singapore Ants) and Cane toads or rodents	Impact to native vegetation onsite including pathogen impacts, competition, endemic fauna impacts, infrastructure impacts (i.e. wiring) and Northern Quoll impacts (predation, competition, illness)	Significant	<ul style="list-style-type: none"> Ensure quarried sand is sieved and washed prior to loading onto transport Detection and removal (via inspection of stockpiles at quarry) Annual reviews of quarry processes and certification Vendor qualification 	Moderate
Deposition (storage) of materials at Derby Freight yard Loading stockpiled material	Pathogen and insect introduction to materials and equipment Introduced flora and fauna allowed to establish on Koolan Island	Impact to native vegetation onsite including pathogen impacts, competition, endemic fauna impacts, infrastructure impacts (i.e. wiring) and Northern Quoll impacts (predation, competition, illness)	Significant	<ul style="list-style-type: none"> Quarantine fence (cane toad focus) at Derby or Broome Freight yards Contractor (Barge Operator) Quarantine procedures approved by MGX Logistics. Inspection regime implemented at Derby Port by MGX Logistics prior to transfer of equipment on to Barge. Baits set by barge contractors to control potential rodents. Report submitted to KIOP. Plant and equipment arriving on Koolan Island inspected by KIOP logistics for presence of pests and cleanliness. Awareness and education of employees including content in the site induction and presentation of pest identification posters and other material. Focus at Derby freight yard. Audit of Quarantine measures is undertaken on annual basis. Mobile plant, equipment and vehicles washed down prior to transport to Koolan Island. 	Moderate

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Project Activity	Risk	Potential Impacts	Inherent Risk	Management Measures	Residual Risk
Transfer of equipment to Island by barge (domestic)	Introduced flora and fauna allowed to establish on Koolan Island	Habitat degradation. Habitat loss Reduction in abundance. Decline in native flora and fauna population health.	Significant	<ul style="list-style-type: none"> Contractor (Barge Operator) Quarantine procedures approved by MGX Logistics. Inspection regime implemented at Derby Port by MGX Logistics prior to transfer of any equipment or goods on to Barge. Contractor Management standards. Baits and traps set by barge contractors to control potential rodents. Report submitted to KIOP. Plant and equipment arriving on Koolan Island inspected by KIOP logistics for presence of pests and cleanliness. Awareness and education of employees including content in the site induction and presentation of pest identification posters and other material. Audit of Quarantine measures is undertaken on annual basis. Mobile plant, equipment and vehicles washed down prior to transport to Koolan Island. 	Moderate
Transfer of equipment from Island by barge	Declared weed species from Island are translocated by movement of plant and machinery from the Island.	Potential offsite impact Non-conformance with quarantine laws around declared species.	Significant	<ul style="list-style-type: none"> Prevention of alien species exiting Koolan Island will be managed as per the approved Quarantine Management Plan (QMP) and associated MGX procedures. Contractor (Barge Operator) Quarantine procedures approved by MGX Logistics. Inspection regime implemented at Koolan Port by KIOP Logistics prior to transfer of equipment on to Barge. Barge contractor standards for cleanliness and hygiene of assets prior to embarking. Contractor Management standards. Baits and rat traps set by barge contractors to control potential rodents. Report submitted to KIOP. Plant and equipment departing Koolan Island inspected by KIOP logistics for presence of pests and cleanliness. Awareness and education of employees including content in the site induction and presentation of pest identification posters and other material. Audit of Quarantine measures is undertaken on annual basis. 	Moderate

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Project Activity	Risk	Potential Impacts	Inherent Risk	Management Measures	Residual Risk
				<ul style="list-style-type: none"> Mobile plant, equipment and vehicles are cleaned via wash-down prior to demobilisation. 	
Foreign Flagged Bulk Carriers berthing at Koolan Island during Iron Ore transfer.	<p>Release of ballast water containing marine pests.</p> <p>Transfer of marine pests from biofouling of hull.</p> <p>Escape of pests from vessel to the Island</p>	<p>Introduction of marine pests to littoral reefs on Koolan Island.</p> <p>Degradation of coral reefs.</p> <p>Displacement of local marine species, loss of local populations.</p> <p>Loss of sea grass habitat.</p>	Significant	<ul style="list-style-type: none"> Foreign flagged vessels are managed under Department of Primary Industries and Regional Development (DPIRD) biosecurity and quarantine requirements and are subject to inspection and audits by DPIRD officers prior to and on arrival on site. Rodent traps and baits deployed on vessels. Passengers and crew do not disembark. Bulk carrier operator procedures for disposal of ballast water in open water. Bulk carrier operator procedures for control of hull. Rat guards are deployed to prevent access to Koolan Island Port Control Officers appointed by KIOP to inspect vessels on arrival and review documentation and supervise ship loading. Spill mitigation capability available onsite (targeted to oil spills but can be used for contaminated ballast). Frequent (at least annual) marine monitoring of port area and three yearly invasive marine pest monitoring 	Low
Movement of personnel from Perth and Broome / Derby to and from Koolan Island by air.	<p>Accidental transfer of weed seed to and from Koolan Island.</p> <p>Introduction of new weed species to Island.</p> <p>Unauthorised ornamental plants bought to the Island by employees and visitors.</p>	<p>Accidental or intentional release and establishment of introduced species to Koolan Island.</p> <p>Habitat degradation.</p> <p>Habitat loss</p> <p>Reduction in abundance.</p>	Significant	<ul style="list-style-type: none"> Employees and visitors are forbidden to bring to the Island, or remove from the Island, any plant or animal species without written authorisation. This is enforced and monitored. Site requirements communicated to employees and visitors through site inductions. Boot brushes provided at Derby, Broome and Koolan airports for passengers to use prior to boarding. Reminders to flight personnel about conducting fauna checks prior to departure 	Moderate

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Project Activity	Risk	Potential Impacts	Inherent Risk	Management Measures	Residual Risk
	Pets bought to Island by employees and visitors.	Decline in native flora and fauna population health.			
Recording and Reporting	Lack of data on Introduced Species could lead to changes to weed populations going unnoticed and introduction of new flora or fauna species being not detected.	Habitat degradation. Habitat loss Reduction in abundance. Decline in native flora and fauna population health.	Significant	<ul style="list-style-type: none"> Annual Northern Quoll survey, annual weed spatial modelling and two yearly on -ground weed surveys undertaken and reports produced. Routine (annual, at minimum) inspections and checks of topsoil dumps, rehabilitation and area inspections. Awareness campaigns and posters to alert employees and visitors of target species and reporting requirements. MGX incident and hazard reporting procedures. 	Low
Non mine related	Introduction of species to Koolan Island through visits by tourists and Traditional Owners to remote and secluded parts of the Island. Intentional release of feral or introduced species as a malicious act.	Habitat degradation. Habitat loss Reduction in abundance. Decline in native flora and fauna population health.	Moderate	<ul style="list-style-type: none"> MOU with Traditional Owners on co-existence and "open door" policy on environmental advice and assistance. Use of Traditional Owner Rangers at times on weed control and Northern Quoll Surveys. Reporting of suspicious activity by the public on the Island by employees, if detected. 	Low
Non mine related.	Natural spread of introduced species across the Island due to animal movements.	Increase in abundance and range spread of Passion flower.	Significant	<ul style="list-style-type: none"> Continued monitoring and research into relationship between fauna movements and diet and spread of Passion flower. Undertake effective weed control 	Significant

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Project Activity	Risk	Potential Impacts	Inherent Risk	Management Measures	Residual Risk
		Decline in habitat values.			
Non mine related.	<p>Introduction of cane toad due to individuals "rafting" to Koolan Island across channel or being carried by storms on debris.</p> <p>Introduction of non-native fauna including cats, foxes etc</p>	Reduction in abundance of Northern Quoll and other predator species.	Significant	<ul style="list-style-type: none"> Tracking of the cane toad movement across Australia; Cane toads have been recorded on Koolan Island. Awareness campaigns and posters. Continued monitoring and surveillance including audio and lures. An internal Cane Toad management plan to be developed in liaison with local stakeholders. Working with DBCA on Cane Toad prevention and mitigation including processes if detected on the island Working with Traditional Owner groups to conduct monitoring in local area that could be potential 'launch' locations for rafting. 	Significant

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3.3. Objectives and Performance Indicators

The environmental management objectives for this QMP are defined in Ministerial Statement 715, condition 11-1 . Corresponding performance indicators for key objectives are described in Table 7 and for management strategies in Table 8.

Table 7: Environmental Objectives and Performance Indicators for Quarantine Management.

Number	Environmental Objective	Target
11-1(a)	Prevent the spread of existing introduced flora and fauna species within Koolan Island and between the island and the mainland.	No new locations of pre-existing weed species recorded on the island as a result of mining operations
11-1(b)	Prevent introduction of additional species of introduced flora and fauna on Koolan Island as a result of the implementation of the proposal.	No new species of introduced flora or fauna species recorded on the island as a consequence of mining operations.
11-1(c)	Control and eradicate introduced flora and fauna species on Koolan Island.	Reduce the extent and/or eradicate existing populations of introduced flora and, if relevant, pest fauna species on the island.

Table 8: Management Strategies identified to meet environmental objectives.

Target	Management measures	Monitoring	Frequency	Reporting	Contingency Actions
Objective 11-1(a): Prevent the spread of existing introduced flora and fauna species within Koolan Island and between the island and the mainland.					
No new locations of pre-existing weed species recorded either on the island or the mainland (Derby freight yard) as a result of mining operations.	<ul style="list-style-type: none"> Pre-clearance flora surveys of undisturbed areas on the island will be conducted prior to ground disturbance in accordance with the Significant Flora Species Management Plan; Demarcate areas of known Declared Weeds or WoNS within authorised GDP boundaries. 	<ul style="list-style-type: none"> Pre-clearance surveys Weed monitoring survey conducted at or near the end of the wet season (April-June) and spatial / aerial monitoring. 	<ul style="list-style-type: none"> Annual (pre-clearance) Every two years (weed) on-ground and annual for spatial 	<ul style="list-style-type: none"> Pre-clearance survey report Biennial weed on-ground survey report Results of annual spatial weed assessment included in annual reporting 	<ul style="list-style-type: none"> If new locations of weeds are recorded in the project area, implement weed control and eradication measures targeted



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Target	Management measures	Monitoring	Frequency	Reporting	Contingency Actions
	<ul style="list-style-type: none"> • Any targeted flora surveys undertaken on Koolan Island shall include introduced flora species. • Cleared vegetation and topsoil from weed-infested areas will be segregated from other stockpiled material from weed free sources; • Unauthorised driving off-track shall not be permitted; • Disturbance to native vegetation and soil will be minimised to limit the potential for invasion by introduced flora and fauna; • Equipment will be cleaned when arriving on site and from different work areas to remove seeds, soil and weed materials. Plant material will be disposed of at appropriate waste receptacles as required or stockpiled for later burial/disposal; • All personnel will be inducted on hygiene and pest species prior to commencing work on site, including: <ul style="list-style-type: none"> ○ risks and awareness of weeds and pest species; ○ overview of hygiene and quarantine procedures; and ○ documentation and reporting requirements; 	<ul style="list-style-type: none"> • Northern quoll monitoring survey conducted at or near the end of the wet season (April-June) to include records of pest fauna. 	<ul style="list-style-type: none"> • Annually 	<ul style="list-style-type: none"> • Northern quoll monitoring survey report • GDP activities included in annual reporting 	<p>towards the relevant species.</p> <ul style="list-style-type: none"> • Staff training and re-induction if measures are not implemented, e.g., lack of or incorrect demarcation.

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Target	Management measures	Monitoring	Frequency	Reporting	Contingency Actions
	<ul style="list-style-type: none"> Progressive rehabilitation will be undertaken to minimise the time between disturbance and rehabilitation. Local provenance, weed-free seed will be used for rehabilitation. 				

Objective 11-1(b): Prevent introduction of additional species of introduced flora and fauna on Koolan Island as a result of the implementation of the proposal.

No new species of introduced flora or fauna species recorded on the island as a consequence of mining operations.	Derby freight yard				
	<ul style="list-style-type: none"> Bulk materials such as quarried sand and gravel is sieved and washed prior to transport to freight yard; Detection and removal of pests and weeds (via inspection of bulk material stockpiles at source); Annual review of bulk material sources (e.g., quarries), vendor pre-qualification and ongoing certification; Quarantine fence (cane toad focus) at freight yard; All freight yard employees and contractors shall be inducted on hygiene and pest species prior to the commencement of works on site, including: <ul style="list-style-type: none"> risks and awareness of weeds and pest species; overview of hygiene and quarantine procedures; and 	<ul style="list-style-type: none"> Monitoring of weeds and pests via the biennial weed survey, annual northern quoll monitoring survey and routine pre-clearance fauna surveys. 	<ul style="list-style-type: none"> Every two years (weed survey) Annually (northern quoll survey) 	<ul style="list-style-type: none"> Suspected occurrences of previously unrecorded declared weed species shall be reported to the EPA, DCCEEW, DWER and DPIRD within 7 days, or as soon as practicable. All sightings of suspected new or new Declared Plant species will be reported and sent to the WA Herbarium for identification, a record of the submission will be recorded in the site Weed Register. Any new introduced fauna i.e. cane toads, cats or foxes shall be investigated and, if verified, reported as soon as practicable to the EPA, DBCA and DCCEEW. 	<ul style="list-style-type: none"> Review and revise hygiene measures including: <ul style="list-style-type: none"> (re) education and awareness of hygiene procedures establish weed hygiene check points and/or change locations; and include additional criteria for inspection and wash-down. Staff training and re-induction if measures are not implemented or incident reporting indicates management processes are not being followed,

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	<ul style="list-style-type: none"> ○ documentation and reporting requirements. • Maintain a weed and introduced fauna register at the freight yard and Koolan Island. 				i.e., access to no-go zones.
<i>Barge ramps and barge movements</i>					
	<ul style="list-style-type: none"> • Barge contractor pre-qualification including review of internal procedures and quarantine mitigation measures, such as implementation of standards for cleanliness and hygiene of assets prior to embarking; • Implement Site Quarantine Requirements Procedure (MGX-HSEC-PR-0015) and associated Quarantine Instructions for Landing Vessels (MGX-PROC-KI_WI-0033), with particular reference to general freight management and the requirement for pest detection, baiting and trapping by barge operators; • Mobile plant, equipment and vehicles arriving/departing Koolan Island shall be inspected for presence of weeds, pests and general cleanliness and certified clean prior to transportation; • Install a small shallow freshwater sump at the fenced cargo storage area to attract pests (particularly cane toads) inadvertently brought to Koolan Island; 	<ul style="list-style-type: none"> • Inspections of barges and all freight/cargo 	<ul style="list-style-type: none"> • All barge movements 	<ul style="list-style-type: none"> • Suspected occurrences of previously unrecorded declared weed species shall be reported to the EPA, DWER, DCCEEW and DPIRD within 7 days or as soon as practicable. • All sightings of suspected new or Declared Plant species will be reported and sent to the WA Herbarium for identification, a record of the submission will be recorded in the site Weed Register. • Any new introduced fauna i.e. cane toads, cats or foxes shall be investigated and, if verified, reported as soon as practicable to the EPA, DBCA, DWER and DCCEEW. 	<ul style="list-style-type: none"> • Review and revise hygiene measures including: <ul style="list-style-type: none"> ○ (re) education and awareness of hygiene procedures ○ establish weed hygiene check points and/or change locations; and ○ include additional criteria for inspection and wash-down.

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	<ul style="list-style-type: none"> All employees and contractors will be inducted on hygiene and pest species prior to the commencement of works on site, including: <ul style="list-style-type: none"> risks and awareness of weeds and pest species; overview of hygiene and quarantine procedures; and documentation and reporting requirements. Barges will have bait and rodent traps set. Captured rodents will be euthanized on board vessels. 				
Jetty and ship-loader					
	<ul style="list-style-type: none"> Foreign flagged vessels are managed under DPIRD biosecurity and quarantine requirements and are subject to inspection and audits by DPIRD officers prior to and on arrival on site; 	<ul style="list-style-type: none"> Weed monitoring survey conducted at or near the end of the wet season (April-May) 	<ul style="list-style-type: none"> Every two years 	<ul style="list-style-type: none"> Suspected occurrences of previously unrecorded declared weed species shall be reported to the EPA, DCCEEW, DWER and DPIRD within 7 days or as soon as practicable. 	<ul style="list-style-type: none"> Review and revise hygiene measures including: <ul style="list-style-type: none"> (re) education and awareness of hygiene

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Target	Management measures	Monitoring	Frequency	Reporting	Contingency Actions
	<ul style="list-style-type: none"> • Appoint Port Control Officers to inspect vessels on arrival, review documentation and supervise ship loading; • Crew on bulk carriers shall not be permitted to leave the vessel, aside from exceptional circumstances (i.e., emergency situations); • Rodent traps and baits deployed on vessels; • Deploy rat guards to prevent access by rats to the ship-loader and jetty; • Install a small shallow freshwater sump at the fenced cargo storage area to attract pests inadvertently brought to Koolan Island; • Ensure waste materials are not removed from foreign marine vessels and disposed of at Koolan Island; 	<ul style="list-style-type: none"> • Inspections of Port area 	<ul style="list-style-type: none"> • Daily during ship-loading 	<ul style="list-style-type: none"> • All sightings of suspected new or Declared Plant species will be reported and sent to the WA Herbarium for identification, a record of the submission will be recorded in the site Weed Register. • Opportunistic sightings and/or capture of cane toads, cats or foxes shall be investigated and, if verified, reported as soon as practicable to EPA, DWER, DBCA and DCCEEW. 	<p>procedures</p> <ul style="list-style-type: none"> ○ establish additional hygiene check points and/or change locations; and ○ include additional criteria for inspection and wash-down.
<i>Personnel and visitor movements</i>					

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Target	Management measures	Monitoring	Frequency	Reporting	Contingency Actions
	<ul style="list-style-type: none"> No flora or fauna will be brought onto or off the island, with the exclusion of scientific specimens taken off the island for identification and vouchering. Reptiles including venomous snakes may at times be brought to the Island by registered and DPaW approved snake handler trainers for the purpose of demonstration and training. Site quarantine requirements and target species communicated to employees and visitors through site inductions, awareness campaigns and posts (including the environmental awareness booklet); Boot brushes provided at Derby, Broome and Koolan airports for passengers to use prior to boarding; 	<ul style="list-style-type: none"> Aircraft inspections completed prior to departure and upon landing at Koolan Island 	<ul style="list-style-type: none"> All aircraft movements. 	<ul style="list-style-type: none"> Suspected occurrences of previously unrecorded declared weed species shall be reported to the EPA, DWER, DCCEEW and DPIRD within 7 days or as soon as practicable. All sightings of suspected new or Declared Plant species will be reported and sent to the WA Herbarium for identification, a record of the submission will be recorded in the site Weed Register. Introduced fauna, if found, shall be reported as soon as practicable to the EPA, DCCEEW and DPaW. 	<ul style="list-style-type: none"> Review and revise hygiene measures including: <ul style="list-style-type: none"> (re) education and awareness of hygiene procedures establish weed hygiene check points and/or change locations; and include additional criteria for inspection and wash-down. procedures and workforce inductions.

Objective 11-1 (c): Control and eradicate introduced flora and fauna species on Koolan Island.

Reduce the extent and/or eradicate existing populations of introduced flora and, if relevant, pest fauna species on the island.	<ul style="list-style-type: none"> Weed control shall be undertaken annually at the optimum time in relation to the biology of the species. Weed control activities shall range from spot-spraying through to a weed control program depending on capability and effectiveness. Weed control shall use herbicide, mechanical and/or manual means 	<ul style="list-style-type: none"> Weed monitoring survey conducted at or near the end of the wet season (April-May) to evaluate the success of weed control programs. 	<ul style="list-style-type: none"> Every two years 	<ul style="list-style-type: none"> Weed control programs shall be recorded in the weed control register. Weed control effort shall be reported in the: <ul style="list-style-type: none"> Annual Compliance Assessment Report (MS715) Annual Environment Report (DMIRS) Annual Compliance 	<ul style="list-style-type: none"> If treated weed populations persist within the area of the Operation, continue to implement weed control and eradication measures targeted towards the relevant species.
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Target	Management measures	Monitoring	Frequency	Reporting	Contingency Actions
	<p>as appropriate to the target weed species.</p> <ul style="list-style-type: none"> • Control of introduced fauna that poses a threat to conservation significant species on the island will be managed in consultation with DPaW Kimberley Regional Office. • Work with external organisations such as CSIRO to determine options for the control of aggressive weed species, in particular <i>Passiflora foetida</i>. • Collaborate with DBCA on research programs for introduced species of risk. 			<p>Statement (EPBC 2006-2522)</p>	<ul style="list-style-type: none"> • If feral fauna records show an increase in fauna occurrence over an annual period, investigate the trend and establish further measures, including: <ul style="list-style-type: none"> ○ Targeted control measures in consultation with DBCA; and/or ○ Undertake critical review of feral fauna management actions, waste control

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3.4. Operations Environmental Management Plan

An Operations Environmental Management Plan (OEMP)³ shall be maintained as the overarching document describing the policies, processes and procedure adopted at KIOP to manage environmental risk. The OEMP shall enable the project to systematically comply with legal and other requirements, identify and control risks, provide adequate and effective resources for environmental management, monitor performance and correct non-conforming situations. The Operations Management Plan is not a specific regulatory condition, however is mentioned in MS715 in relation to an environmental management system. The OEMP is internally reviewed every four years and is currently under revision. The OEMP is approved as part of MS715 (EPA) requirements and is implemented as part of the ongoing management of environmental aspects on Koolan Island since 2006.

Specific to Quarantine matters, the OEMP contains the management procedures to Terrestrial Fauna, Marine Management, Weed Management and Flora Management and Rehabilitation. Site specific safe work procedures (SWI's) are also maintained by KIOP to support the management provisions stated in the OEMP. SWI's currently exist for logistics and supply, quarantine, weed control, marine monitoring and ground disturbance. A link to the OEMP is located in Appendix A.

The QMP also links to the MGX Standard for Quarantine (Section 1.7) which is the internal minimal standard applied at MGX operations around quarantine risk management.

3.5. Roles and Responsibility

The accountability for the implementation of this plan is assigned to the Senior Site Executive - Koolan and the Environment and Community Superintendent and in line with the MGX Quarantine Standard (Section 1.7). The Senior Site Executive is a designation under Workplace Health and Safety requirements and is also the General Manager of Koolan Iron Ore.

Area Managers are responsible where certain aspects of this plan fall within their area of responsibility. A major component of quarantine is managed by the Logistics and Commercial function of MGX. These roles utilise the resources made available by the Senior Site Executive to ensure the plan is implemented as required at all levels of the project.

It is the responsibility of the Environment and Community Superintendent to report to the Senior Site Executive (General Manager) on the performance of this plan, its review and recommendations for improvement where necessary in consultation with other Departments.

All personnel engaged to work at KIOP are made aware of requirements under this QMP and associated environmental standards. The OEMP describes the roles and responsibilities of each of the levels of hierarchy at KIOP as they relate to broader environmental management at KIOP.

Certain roles i.e. Environmental personnel and infrastructure personnel undertake specific training formally to ensure competency and knowledge for specific responsibilities. This can be in relation to weed identification, chemical application or quarantine requirements and biosecurity.

³ Koolan Island Operational Environmental Management Plan (Mount Gibson Iron Ltd., 2020)

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3.6. Environmental Awareness and Training

Environmental training is undertaken in MGX through the informal and formal delivery of material by internal or external trainer and assessors and facilitators. Training and competency is managed internally in MGX through application of internal standards and procedures⁴.

Personnel onsite such as Environmental personnel, weed control (chemical use) operators and logistics officers have specific qualification or training which is formal as outlined below.

Resources onsite to assist with weed identification, introduced fauna and other biosecurity concerns are sourced from the Environmental Department. This includes the KIO Herbarium and Weed Herbarium lists, as well as Department of Primary Industries and Regional Development resources (Declared weeds and weed identification pages) such as [Declared plants in Western Australia | Department of Primary Industries and Regional Development](#)

3.6.1. Quarantine Training

No formal quarantine training (such as Certificate or qualifications) is provided to MGX staff however employees must be deemed competent and are required to demonstrate understanding of site procedures. Contractors may undertake formal quarantine training (chemical qualifications) however it is not a prerequisite for the award of contracts with MGX.

Certain personnel undertake formal qualifications for activities related to chemical application (Section 3.6.2) or quarantine. This includes national training accreditation such as a cert III or IV which provide a specific certification or qualification.

3.6.2. Weed Control Training

Select KIOP employees are provided with certified Chemical Safety Training to undertake weed control on Koolan Island in accordance with site safety and environmental procedures. Contract weed controls companies with appropriate training can also be utilised as part of the weed control program.

Only companies and individuals with demonstrated knowledge in weed identification or under direct supervision of a competent (in weed identification) person can undertake weed control activities.

Personnel involved in weed control must completed and understand the required work instruction (Appendix A) in relation to manual removal or herbicide spraying to ensure competency in application of these techniques. This includes a Supervisor sign off to endure an understanding of weed control methodology.

3.6.3. Inductions and Awareness

A site-based induction is delivered on Koolan Island for all employees and contractors prior to commencement of work. The induction includes an outline of quarantine, weeds and feral fauna as described in this document (examples are included at Appendices D and E).

The site workforce is educated through awareness campaigns on weeds and introduced fauna conducted during scheduled toolbox talks. Posters and other information material is posted on notice boards and in training rooms for example see Appendix C (Cane Toads) and Appendix D (Declared Weeds).

⁴ MGX HSEC (Internal) Management Standard: Stand 1.9 Training and Competency (Mount Gibson Iron Ltd., 2013d)

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A profile of the declared and target weeds is included in Appendix F and used in identification processes and general awareness for personnel.

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3.7. Contractor Management

Standards for Contractor environmental requirements are set under terms of contract and through application of MGX procedures while operating at MGX operations⁵. The main contractors and external organisations that provides logistics services and conducts operational activities on Koolan Island include:

- CMC Barging: provides freight services to Koolan Island from Derby or Broome transporting supplies and materials.
- Regal Transport/Centurion/Toll: provides road freight and trailers for transfer to Barges. Freight can arrive from any location in Australia.
- Aviair: provides air transport service for passengers to Koolan Island from Broome or Derby.

The barge operator is required to provide quarantine procedures and protocols to MGX as part of contract prequalification requirements. The contractor is required to carry out inspections, set baits and traps maintain records and report any actual or suspect quarantine related incident. Audits are conducted on contractors to ensure that HSEC requirements are being met.

A number of foreign flagged bulk iron ore carriers visit Koolan Island and receive iron ore for shipping to customers in the Peoples Republic of China. These vessels are contracted by the customer and abide by international shipping and national quarantine laws. DPIRD representatives routinely conduct inspections of the visiting vessels in consultation with the MGX Port Facility Security Officer (PFSO).

3.8. Incidents and Corrective Action

All incidents and hazards are reported and managed in accordance with company standards and procedures⁶. Depending on the actual and potential severity of an incident resulting from a quarantine procedural non-conformance the event will be escalated to senior management level and to the regulating agencies (DWER, DBCA, DCCEEW and DPIRD).

Any new species of declared weed found on Koolan Island is reported to the DCCEEW, DWER and DPIRD as soon as practicable. Any actual or potential sighting of cane toad or feral animals is also reported to the same regulators as soon as practicable.

All incidents and hazards are recorded within the company event reporting and corrective action management system. Investigations are undertaken for incidents under the event reporting and investigation procedures. Records are maintained and reported to regulating agencies when required.

3.9. Monitoring and Reporting

3.9.1. Weed Monitoring

Weed monitoring is completed through two main methods: an annual spatial survey and a two-yearly on ground survey. The spatial survey utilises new technology to assess extent, distribution, species and vegetation health and helps to map changes over time which can target a wider area than the on-ground survey.

The annual spatial modelling program is undertaken using a drone or fixed wing flyover of the Island and vegetation coverage including weeds are modelled to provide spatial distribution and

⁵ MGX HSEC Management Standard; Standard 1.4 Contractor Management (Mount Gibson Iron Ltd., 2013c)

⁶ MGX HSEC Management Standard; Standard 1.3 Event Management (Mount Gibson Iron Ltd., 2013b)

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understanding of density. This allows for improved knowledge of areas as it includes inaccessible areas as well as waste dump slopes. It will also assist in analysing the effectiveness of control programs.

The purpose of a two-yearly weed survey is to map and describe weed species present on Koolan Island and measure changes to range and distribution of target species of declared and environmental weeds in particular locations using on-ground methods such as transects and quadrats. The survey also searches for species of declared weeds not previously recorded to understand the success of quarantine measures. Methods employed during weed surveys comprise meandering traverses across target areas and identified weed zones (APM, 2015a, 2020; Aecom, 2023), and the mapping of weed distribution extent.

The result of the weed survey work enables an agile approach to weed control activities and guide upcoming activities as well as provide an ability to evaluate the effectiveness of previous control works. Through a change in methodology to include spatial modelling and identification combined with a two yearly on-ground survey, this information helps to determine both new potential areas to be targeted for weed control, effectiveness of previous control activities and specific species targeting (i.e. the declared weeds) for specific removal. As such, the frequency change of on ground surveys from annual in previous versions of this plan, still allows for adaptability to weed management and target control areas, while building on the knowledge built from over 15 years of annual on ground surveys. Mapping of changes including distribution, species and extent is also used to assist in weed control priorities and completed as part of the annual monitoring to allow for time scale of previous monitoring work.

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3.9.2. Marine Monitoring

In accordance with the Koolan Island Marine Management Plan, surveys are conducted to measure if mining activities have had an impact on the marine environment. Water quality and coral habitat health is measured at test sites. Surveys are also conducted on marine sediments to test for iron ore, heavy metals and anti-fouling residue in the benthic sediment. Survey of marine pests is conducted using collectors designed to CSIRO standards. Collectors are generally set prior to the onset of the wet season. Samples are dispatched to an accredited facility for taxonomic identification. Further information on marine monitoring may be obtained from the Koolan Island Marine Management Plan.

3.9.3. Fauna Monitoring

Pre-clearance surveys are currently undertaken ahead of disturbance for areas that have not been surveyed previously in accordance with relevant EPA position statements and guidance notes on terrestrial biological surveys and protection of native vegetation in Western Australia.

The Significant Fauna Species Management Plan outlines requirements for a significant fauna register, as well as the site fauna interaction register for all non-significant encounters.

No target terrestrial feral fauna surveys are conducted on Koolan Island. Sightings of suspect fauna will be documented from opportunistic observations. Where a verification sample is able to be retrieved, verification of the species must occur and details captured in the Introduced Fauna register. This is reported to the Department on receipt of verification. Reports of suspected introduced fauna are received from the workforce and investigated by the Environmental Department.

As outlined in the Northern Quoll Management Plan, results from active annual monitoring of the Northern Quoll shall be reported to DCCEEW as required under EPBC 2006/2522 (Condition 2) as well as DWER under MS715.

All fauna fatalities due to operations are captured in the site Fauna Register. Cane toad surveillance monitoring is captured separately and is managed under the Cane Toad Management Plan (an internal management plan document). Fauna sightings of potential introduced fauna (cats, foxes etc) are also captured in the Fauna Register and the register is maintained on a minimum monthly basis by the Environmental Department.

3.9.3.1. Cane toad surveillance and monitoring

Cane toad surveillance and monitoring is undertaken at Koolan Island with the aim of early detection and prevention of cane toads becoming established on Koolan Island. Early detection and prevention requires identification of the most likely pathways for introduction (i.e. movement of barges, ships, planes, freight etc.). Once these pathways and applying adequate pathway surveillance, controls, and procedures to intercept and remove cane toads found at these points. Potential cane toad habitat within the Project will be targeted for inspections as part of the cane toad monitoring program to be conducted in the wet season. The proposed monitoring schedule is summarised in Table 9.

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Table 9 Monitoring schedule of cane toad habitat

Monitoring component	Method	Frequency of Reporting
Conduct a manual survey for adults and juveniles.	<ul style="list-style-type: none"> • During the warmer months, listen for calls and conduct a visual search at night with a strong torch. • Daytime searches for sheltering toads should also be included but nocturnal searches are generally more effective. • Shelter sites such as crevices between rocks, hollows under large, live trees and leaf litter or dense vegetation on the ground, or drainpipes or other areas immediately adjacent to freshwater. 	<p>Monthly through the wet season if no cane toads have been recorded on Koolan Island</p> <p>Or</p> <p>Ongoing following recording of Cane toad at Koolan Island</p> <p>Or</p>
Conduct a manual survey for eggs and tadpoles.	<ul style="list-style-type: none"> • Focus on shallow pools with gradual rather than steep slopes and open and gradually sloping banks. • Remove spawn and survey for tadpoles with a dip-net. 	<p>Every 2 days following recording of breeding activity in the location</p>
Deploy acoustic recorders at potential breeding sites	<ul style="list-style-type: none"> • Deploy recorders around or close to water bodies with permanent or near permanent water e.g. sumps and Pindan Creek. • Download and analyse recordings on a weekly basis 	
Survey for calling males.	<ul style="list-style-type: none"> • Calling may be elicited by playing back a Cane toad call from an audio device. 	
Implement chemical tadpole lures and traps (Crossland et al 2012, 2021).	<ul style="list-style-type: none"> • If eggs or tadpoles are observed, trapping should be implemented. • The trap works using a funnel rap baited with poison extracted from adult cane toads, which attracts Cane toad tadpoles but repels native tadpoles. 	
Conduct a manual survey for metamorphs.	<p>If breeding is suspected, manual searches for metamorphs should initially focus on the margins of water bodies, keeping in mind their small size</p>	

If cane toads are observed breeding in areas under surveillance, as presented above, routine inspection of additional 'high-risk' areas will be required, as summarised in the following section.

3.9.3.2. High risk area inspections and testing

High-risk locations of arrival have been identified for routine inspection. The purpose of identifying and inspecting high risk locations is the rapid detection and eradication of any Cane toad arrivals before they can spread to other, less frequently monitored areas.

High risk locations are areas where arrivals to the island occur via air or sea, including:

- airstrip and airport facility;
- village dry mess unloading dock;
- barge landing and port facility (Koolan and Derby); and
- constructed shallow earthen sumps presented at access points to attract toads.

Personnel working in these are also engaged to report any sightings or potential sightings (acoustic) which prompts a further inspection of the area by the Environmental Department.

Routine inspections occur high-risk locations. Surveillance will extend to within at least 100 m of the arrival site. Commonly known toad hideouts include the spaces in and around:

- shipping containers;
- air conditioner units;
- hollow concrete blocks and rockeries/rock bunding;
- Pallets;
- Sand boxes
- Sewage and septic treatment infrastructure;
- Tyre wells; and
- Timber and other stored materials.

High risk vectors are those that frequently visit high risk locations and may offer further assisted transport to cane toads to other parts of the island. If cane toads are recorded at the high-risk locations, the high-risk vectors will be immediately notified and searched. These are:

- Personnel transport buses operating between the airports and the accommodation village;
- Transport vehicles that move deliveries between the place of entry and the destination of use.
- Reporting of the routine inspections will occur through the Introduced Fauna Register.

If a Cane toad is reported during the routine inspections, further searches for adult and juvenile cane toads will be initiated, focusing on the area within 200 m of the location/s where toads were reported. Dispersal rates range from 0 to 1.8 km per night, with longer distances occurring on roads (Brown et al. 2006). If Cane toad sightings are reported but the animal evades capture, night-time searches should occur in a radius up to 1.8 km from the location of sighting, focusing on areas near roadsides and of suitable habitat (i.e. near water sources).

3.9.4. Inspections

Barge and ore carrier inspections are completed monthly with all barges (due to roll on roll off process) having a quarantine inspection completed on each trip to site. This is a checklist inspection approach to ensure both the barge and equipment (cargo) is inspected at both Derby (or Broome) and Koolan Island.

Post weed control inspections are completed to help assess effectiveness of the weed control program. Pest control works are completed either as needed (i.e. termite damage noted) or on a quarterly basis around infrastructure including kitchens and accommodation areas. This includes the baiting, spraying and trapping of insects and potential introduced species. This work is completed as part of the quarterly inspection. A Contractor spraying company completes this work.

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Site Inspections are carried out for environmental aspects across operational areas monthly and this includes the presence of weeds.

3.9.5. Reporting

Reporting of outcomes from monitoring events are captured within the company obligations management system and shall be undertaken in accordance with relevant requirements.

The weed survey report is submitted to the DWER in the subsequent annual report. Any significant findings (i.e. new declared weeds) are reported to the DWER as soon as practicable. A four yearly performance report is also submitted to the DWER summarising environmental achievements during the reporting period.

The EPBC approval also requires an annual compliance report and an independent verification audit conducted every three years and submitted to the DCCEEW under Condition 10.

The marine survey report is submitted to the DWER in the subsequent annual report. Any results which exceed trigger values are reported to the DWER as soon as practicable.

Reporting of incidents is undertaken in accordance with DWER Licence requirements for emissions to the environment, tenement conditions and relevant obligations and conditions.

As required under EPBC 2006/2522 (Condition 4) requirements, any new weed/introduced fauna species shall be reported to the relevant regulators including DCCEEW and the DWER and the Departments shall be consulted in relation to any proposed or arising actions. Additionally, the report and consultation process (and resulting actions and an implementation) must be outlined in the annual compliance reporting process to DCCEEW and DWER. All outcomes, including no new detections of introduced flora and fauna, will be captured in annual compliance reporting to DWER and DCCEEW and checked via three-yearly audits.

3.10. Research and Consultation

External consultants and subject matter experts including CSIRO researchers and regulatory authorities will be consulted during the review of the QMP to provide advice and feedback on the QMP. Consultation with Traditional Owner Groups and other community stakeholders will take place as part of the approvals process and mine closure consultation and this includes quarantine aspects of the project.

MGX is committed to increasing global knowledge on weed ecology and has previously and continues to sponsor the CSIRO in research on the ecology of Passion flower/Wild Passionfruit (*Passiflora foetida*) (Webber, Yeoh and Scott 2014).

In 2013, MGX donated a total of \$100K to the CSIRO towards *Passiflora foetida* Research and has hosted and assisted CSIRO scientists on Koolan Island towards further independent research. Despite a severe downturn in operations in late 2014 the intent is to continue further support toward *Passiflora foetida* research on Koolan Island. Further research is currently underway into potential effective controls including the use of a biological control to mitigate *Passiflora foetida* on Koolan Island.

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In 2014, KIOP assisted in a (then) DPaW research program to test bait used in a feral cat control trial. Over one week baits were set out along transects on Koolan Island and camera traps recorded the reaction of Northern Quoll to the bait. The intent of the program is to identify a suitable bait to control feral cat population on the Kimberley Island without presenting a risk to Northern Quoll. KIOP has also been approached to assist in potential Cane Toad aversion research conducted by DBCA. Note that there are no known feral cats currently on Koolan Island.

In 2014, MGX approved a Murdoch University PhD research program on Northern Quoll specifically related to the impact of mining on the range, health, distribution and diet of the Northern Quoll on Koolan Island. Scat surveys in 2014 undertaken by the PhD student indicated that *Passiflora foetida* is a major component of the diet of Northern Quoll possibly resulting in the spread of the weed.

3.11. Weed Control

Where practicable⁷ and safe to do so, weed control is undertaken on Koolan Island throughout the year within the mining lease and tenements. Weed control is a labour-intensive endeavour requiring personnel suited to working under difficult environmental conditions, using chemicals, mobile plant and machinery and tools. The main physical constraints to effective weed control on Koolan Island is the limited accessibility due to rough terrain, the high density of weed growth in certain areas and the high temperatures and humidity associated with Koolan Island during the peak of weed growth between October and May. Seasonal and climatic factor play a major factor in use of herbicide as wet and dusty conditions severely impede the effectiveness of herbicide on weeds.

Broad scale weed control is generally completed in dry season for spraying based on conditions and weed stages of life (prior to seed set) noting that high growth can occur between Oct and May (wet season) so spot spraying may also occur at any time. Additionally weed spraying is also completed at infrastructure locations on a quarterly or as needs basis (i.e. weed density). Manual weed control can occur year-round and target areas generally includes the removal of Passiflora weed from areas of rehabilitation or where signs of vegetation coverage (i.e. growing over other plants) is present. Where a declared weed is identified, this is either removed immediately (within a 14 days) via manual removal or depending on the size of the plant via spraying and then manual removal of any seeds/nuts present.

Environmental weed control uses both manual removal and spraying techniques to target weeds. Each year a review of weed mapping and survey results is completed which assists in targeting areas for control. For example, the spatial survey work completed in May 2024 (Figure 2) outlined areas of higher density Passiflora in some topsoil stockpiles and rehabilitation areas and these are being targeted for control works in the 2025 dry season.

⁷ Where practicable relates to safe and practicable which includes heights, slopes, ease of access, movement of equipment, impacts of overspray etc

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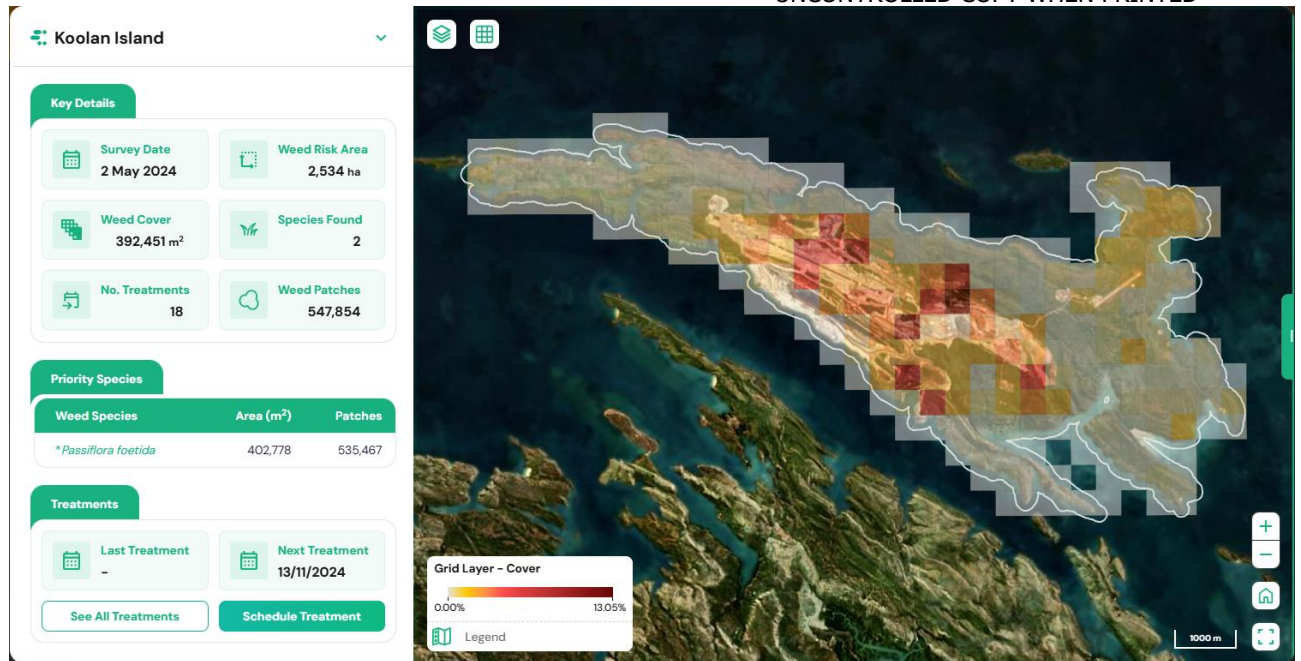


Figure 2: Weed spatial mapping; May 2024

Several options are considered in planning and executing weed control programs including the target species, location of control and method used. Weed control on Koolan Island is focussed on topsoil stockpiles in accordance with site soil management procedures and on rehabilitation sites. *The BHP town site is not included as a target area for weed control currently.* Due to the constraints mentioned above little to no weed control is attempted away from areas of mine disturbance unless deemed effective to control. For example, previous spraying has been completed in drainage lines to reduce risk of spread.

A Weed Register is kept of all weed control undertaken onsite. There is also an identification process through the Environment Department and using such tools as Appendix F to assist in weed control programs as well as general awareness. The Weed Register is updated at a minimum monthly and includes all weed control work such as manual removal and chemical spraying as well as the target species. The Weed Register is held by the Infrastructure Department (and digitised by the Environmental Department on a quarterly basis).

The weed register is utilised when reviewing results of monitoring through on-ground surveys and spectral analysis to assist in determining the effectiveness of weed control programs as outlined in Section 3.9.1. Efficacy of the weed control program is also reviewed through site inspections post treatment for key areas. For example, infrastructure weed control around buildings is undertaken six monthly, however to areas near rehabilitation, topsoil, along tracks and drainage lines these are targeted areas and are checked one month and also six months post application of control to review effectiveness and follow up treatments. Additionally, vegetation health is assessed on previously weed controlled areas using data collected via drone in the annual monitoring.

3.12. Control of Records

Records will be managed in accordance with MGX standards and procedures.

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3.13. Emergency Response

The response procedures required in the case of an environmental emergency are described in the site *Crisis and Emergency Management Plan*⁸.

Specialised training is provided to a dedicated Emergency Response Team (ERT) in the area of bush fire control and containment and hazardous material spill. The ERT has a limited capacity to respond to environmental emergencies based on resource availability and operator capability.

Significant event response is coordinated by appointed roles trained to form part of a KIOP Emergency Management Team (EMT). EMT members are rostered on whilst on site. The team leader is the Senior Site Executive or delegate and team members are drawn from functional groups across the Operation. Scenario based training is undertaken twice a year to ensure all shifts are included.

The undetected arrival and colonisation of Koolan Island by cane toad is of concern primarily due to the potential impact on the Northern Quoll population.

Any event leading to increased rates of mortality or a significant decline in Northern Quoll health or population shall also be investigated in accordance with the Northern Quoll Management Plan.

3.14. Management Review

This document shall be reviewed two yearly internally and four yearly based on regulatory conditions. Changes to operations, approvals, legal and other requirements and risks registers shall be reflected in the review and incorporated into the Plan. New revisions of this document require approval from DCCEEW (Condition 6) and the EPA (WA) (as part of DWER). Once approved the new version or changes shall be communicated and implemented across the operation and reported in the respective annual environmental reports (DCCEEW and DWER). This QMP shall undergo review every four years.

3.15. Condition Mapping

The below table outlines the key conditions of EPBC 2006/2522 in relation to Quarantine Management and where these are addressed in this plan.

Table 10: Condition mapping

Condition Number	Condition	Document Location (addressed in this plan)
2	The results of monitoring of the Northern Quoll population occurring in accordance with Section 9.0 Monitoring and 10.0 Contingencies, of the <i>Koolan Island Iron Ore Mine and Port Facility Project Northern Quoll Management Plan 2011</i> must be reported to the department. Any consultation taking place with the Western Australian Department of Environment and Conservation (DEC) or its successors must also include discussions with the department and any corrective and/or preventative actions required by DEC or its successors, must be developed in consultation with and with the agreement of the department.	Section 3.9.3 NOTE references contained in the Condition are to the Northern Quoll Management Plan and not this plan.
3	The person taking the action must adopt and implement the <i>Quarantine Management Plan</i> , prepared for Aztec	Section 1.3

⁸ [MGX HSEC MS Standard 1.7 Crisis and Emergency Management](#) (Mount Gibson Iron Ltd., 2019)

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	Resources Limited by <i>ecologia</i> Environment and dated 24 May 2006, or any subsequently approved by the Department.	(This plan is proposed as a subsequent approved plan and will be implemented upon approval).
4	In the event that new individuals or populations of introduced flora or fauna are identified in Koolan Island, the Department must be consulted, along with the WA agencies mentioned in the corresponding Contingencies section of the Quarantine Management Plan, and included in the development process of any response actions deemed necessary by all relevant agencies in consultation.	Section 1.3 Section 3.9.5 Reporting Section 4 Contingencies Updated to reflect current agency names.
6	If the person taking the action wishes to carry out any activity otherwise than in accordance with the plans, programs or measures referred to in paragraphs 1 to 4, the person taking the action may submit for the Minister's approval a revised version of any such plan, program or measure. If the Minister approves a revised plan, program or measure so submitted, the person taking the action must implement that plan, program or measure instead of the plan, program or measure as originally approved.	Section 1.3 Section 3.14 Revised plans shall be submitted to DCCEEW as required.
10	The person taking the action must undertake an independent audit of compliance with EPBC approval conditions every three years from the date of this variation, for submission to the department. Prior to commencement of the audit the department must approve the independent auditor and the audit criteria	Section 3.9.5

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4. CONTINGENCIES

In the event that new individuals or populations of introduced flora or fauna are identified on Koolan Island, DCCEE and DWER (EPA) and DPIRD will be informed within 7 days of confirmed species identification.

Sightings reported by personnel are investigated, however if no verification of the species can occur (not found again, not collected or positively identified) then this species must be recorded in the Fauna register and reported to the Department (DCCEE and DWER) in the annual report.

Any spread of existing introduced species found will be reported in the AER with details of management actions taken.

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5. REFERENCES

- Aecom (2023). Koolan Island Annual Weed Assessment 2022. Perth, Western Australia: Aecom Australia Pty. Ltd.
- APM (2014a). Koolan Island Iron Ore Mine and Port Facility Project: Northern Quoll Annual Island-Wide Monitoring 2014. Perth, Western Australia: Animal Plant Mineral Pty. Ltd.
- APM (2014b). Koolan Island Iron Ore Mine and Port Facility Project: Northern Quoll Annual Island-Wide Monitoring 2018. Perth, Western Australia: Animal Plant Mineral Pty. Ltd.
- APM (2015a). Koolan Island Iron Ore Mine and Port Facility; Annual Weed Monitoring 2015. Perth, Western Australia: Animal Plant Mineral Pty. Ltd.
- APM (2015b). Koolan Island Iron Ore Mine and Port Facility Project: Northern Quoll Annual Island-Wide Monitoring 2015. Perth, Western Australia: Animal Plant Mineral Pty. Ltd.
- APM (2016). Koolan Island Iron Ore Mine and Port Facility Project: Northern Quoll Annual Island-Wide Monitoring 2016. Perth, Western Australia: Animal Plant Mineral Pty. Ltd.
- APM (2017). Koolan Island Iron Ore Mine and Port Facility Project: Northern Quoll Annual Island-Wide Monitoring 2017. Perth, Western Australia: Animal Plant Mineral Pty. Ltd.
- APM (2019). Koolan Island Iron Ore Mine and Port Facility Project: Northern Quoll Annual Island-Wide Monitoring 2019. Perth, Western Australia: Animal Plant Mineral Pty. Ltd.
- APM (2020). Koolan Island Iron Ore Mine and Port Facility; Annual Weed Survey and Weed Management 2020. Perth, Western Australia: Animal Plant Mineral Pty. Ltd.
- Beard, J. S. (1979). *Kimberley: the vegetation of the Kimberley area*. Nedlands: University of Western Australia Press.
- CALM (1994). A representative marine reserve system for Western Australia : report of the Marine Parks and Reserves Selection Working Group. Como, Western Australia: Department of Conservation and Land Management.
- DAFWA (2013). Biosecurity and Agriculture Management Act 2007; Biosecurity and Agriculture Management Regulations, 2013. Available at: www.legislation.wa.gov.au
- Ecologia (2005). Koolan Island Iron Ore Mine and Port Facility, Flora and Vegetation Assessment. Perth, Western Australia: Ecologia Environment.
- Ecologia (2006). Koolan Island Iron Ore Mine and Port Facility Project: Northern Quoll Baseline Population Survey, April 2006. Perth, Western Australia: Ecologia Environment.
- Ecologia (2008). Koolan Island Iron Ore Mine and Port Facility Project: Northern Quoll Annual Monitoring Survey, April 2007. Perth, Western Australia: Ecologia Environment.
- Hussey, B. M. J. (2007). *Western weeds: a guide to the weeds of Western Australia.*, 2nd ed. Victoria Park, W.A.: Weeds Society of Western Australia.
- Keighery, G. J., Gibson, N., and Mitchell, A. A. (1995). Biological inventory of Koolan Island, Western Australia; 1 Flora and vegetation. *Records of the Western Australian Museum* 17, 237–248.

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- MBS (2009a). Northern Quoll Annual Monitoring 2008: Mount Gibson Iron Limited Koolan Island Operations. Perth, Western Australia: MBS Environmental.
- MBS (2009b). Northern Quoll Annual Monitoring 2009: Mount Gibson Iron Limited Koolan Island Operations. Perth, Western Australia: MBS Environmental.
- MBS (2010). Northern Quoll Annual Monitoring 2010: Mount Gibson Iron Limited Koolan Island Operations. Perth, Western Australia: MBS Environmental.
- MBS (2011). Northern Quoll Annual Monitoring 2011: Mount Gibson Iron Limited Koolan Island Operations. Perth, Western Australia: MBS Environmental.
- MBS (2012). Northern Quoll Annual Monitoring 2012: Mount Gibson Iron Limited Koolan Island Operations. Perth, Western Australia: MBS Environmental.
- MBS (2013). Northern Quoll Annual Monitoring 2013: Mount Gibson Iron Limited Koolan Island Operations. Perth, Western Australia: MBS Environmental.
- McKenzie, N. L., Fontanin, L., Lindus, N. V., and Williams, M. R. (1995). Biological inventory of Koolan Island, Western Australia; 2 Zoological notes. *Records of the Western Australian Museum* 17, 249–266.
- Mount Gibson Iron Ltd. (2011). Koolan Iron Ore Operation Northern Quoll Management Plan 2011.
- Mount Gibson Iron Ltd. (2012a). Koolan Island Iron Ore Mine and Port Facility Project; Significant Fauna Species Management Plan.
- Mount Gibson Iron Ltd. (2012b). Koolan Island Iron Ore Mine and Port Facility Project; Significant Flora Species Management Plan.
- Mount Gibson Iron Ltd. (2013a). HSEC Management Standard; Standard 1.2 Risk Management (Document Number MGX-HSEC-CP-ST-0002, revised 2023).
- Mount Gibson Iron Ltd. (2013b). HSEC Management Standard; Standard 1.3 Event Management (Document MGX-HSEC-CP-ST-0003, revised 2023).
- Mount Gibson Iron Ltd. (2013c). HSEC Management Standard; Standard 1.4 Contractor Management (Document MGX-HSEC-CP-ST-0004, revised 2023).
- Mount Gibson Iron Ltd. (2013d). HSEC Management Standard; Standard 1.9 Training and Competency (Document MGX-HSEC-CP-ST-0009 revised 2023).
- Mount Gibson Iron Ltd. (2013e). HSEC Management Standard; Standard 4.7 Quarantine Management (Document MGX-ENCO-CP-ST-0013, revised 2023).
- Mount Gibson Iron Ltd. (2015). Koolan Island Marine Management Plan (Document MGX-ENCO-KI-PL-0003, revised 2024).
- Mount Gibson Iron Ltd. (2019). HSEC Management Standard; Standard 1.7 Crisis and Emergency Management (Document MGX-HSEC-CP-ST-0005, revised 2023).
- Mount Gibson Iron Ltd. (2020). Operations Environmental Management Plan (Document MGX-HSEC-KI-PL-0012, revised 2020).

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- National Biosecurity Committee (2016). Modernising Australia’s Approach to Managing Established Pests and Diseases of National Significance; Discussion Paper- Summary of Submissions. Department of Agriculture and Water Resources. Available at: <https://www.agriculture.gov.au/about/publications>
- Schoknecht, N. R., and Payne, A. L. (2011). Land systems of the Kimberley region, Western Australia. *DPIRD Technical Bulletin 98*. Available at: https://library.dpird.wa.gov.au/tech_bull/11/
- SEWPAC (2013). Weeds of National Significance. Commonwealth of Australia: Department of Sustainability, Environment, Water, Population and Communities.
- Starr, F., Starr, K., and Loope, L. (2003). *Cryptostegia* spp. Rubber vine. Asclepiadaceae. Available at: http://www.hear.org/starr/hiplants/reports/pdf/cryptostegia_spp.pdf (Accessed March 13, 2009).
- Thackway, R., and Cresswell, I. D. (1995). An Interim Biogeographic Regionalisation for Australia. Canberra: Australian Nature Conservancy.
- Western Australian Herbarium (1998). FloraBase - The Western Australian Flora. Available at: <http://florabase.dec.wa.gov.au/> (Accessed June 26, 2013).

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Mount Gibson Iron

QUARANTINE MANAGEMENT PLAN
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APPENDICES

Appendix A: Relevant Management Plans and Site Procedures

Management Plans (Publicly Available)

- Mount Gibson Iron Ltd. (2011). Koolan Iron Ore Operation Northern Quoll Management Plan 2011.
- Mount Gibson Iron Ltd. (2015). Koolan Island Marine Management Plan (Document MGX-ENCO-KI-PL-0003, revised 2024).
- Mount Gibson Iron Ltd. (2020). Operations Environmental Management Plan (Document MGX-HSEC-KI-PL-0012).
- Mount Gibson Iron Ltd. (2012a). Koolan Island Iron Ore Mine and Port Facility Project; Significant Fauna Species Management Plan.
- Mount Gibson Iron Ltd. (2012b). Koolan Island Iron Ore Mine and Port Facility Project; Significant Flora Species Management Plan.

All current approved management plans are publicly available through the Mount Gibson Iron; Sustainability and Environmental Reports portal, noting the current approved Quarantine Management Plan is also available. See link:

<https://www.mtgibsoniron.com.au/people-sustainability/sustainability-and-environmental-reports/>

Internal Management Plan/s

Mount Gibson Iron Ltd (2024). Koolan Island Iron Ore Mine and Port Facility Project; Cane Toad Management Plan

Site Safe Working Instructions and Forms (Internal Documents)

MGX-HSEC-KI-PR-0015 Site Quarantine Requirements
MGX-HSEC-KI-FR-0013 Quarantine Inspection Checklist
MGC-CRUSH-KI-WI-0033 Quarantine Instructions for Landing Vessels
MGX-HSEC-KI-PR-0010 Vegetation Clearance and Soil Resource Management
MGX-HSEC-KI-WI-0012 Ground Disturbance
MGX-HSEC-KI-FR-0003 Ground Disturbance Permit
MGX-HSEC-KI-WI-0015 Manual Weed Control
MGX-MAINT-KI-WI-0091 Herbicide Spraying
MGX-HSEC-KI-WI-0042 Weed Control Using Quik Spray System 9TDE
MGX-HSEC-KI-WI-0037 Tri-Annual Marine Monitoring Pest Collectors
MGX Airfreight Manifest Template
MGX Barge Manifest Template
KIO Weed Register (living document, frequently updated)
KIO Herbarium Register (living document)
KIO Herbarium Weed List (living document)

External Resources

[Declared plants in Western Australia | Department of Primary Industries and Regional Development](#)

Appendix B: Description of the Environment

Koolan Island is one of the largest of the many islands comprising the Buccaneer Archipelago located in the Kimberley region of Western Australia. The Buccaneer Archipelago consists of some 800 to 1 000 rocky islands with small embayments and beaches (CALM, 1994).

Koolan Island lies on the coastal interzone of the Northern Kimberley and Dampier biogeographic region as described in the Interim Biogeographic Regionalisation for Australia (IBRA) (Thackway and Cresswell, 1995). The Rangeland Land System Mapping for Western Australia dataset places Koolan Island in the Lubbock Land System which is classified as: *Rugged sandstone cuestas, ridges and plateaux; low open woodlands and curly Spinifex* (Schoknecht and Payne, 2011).

Heritage Status

The Australian Heritage Council determined the West Kimberley be placed on the National Heritage List in August, 2011. The area was recognized for its rich living Aboriginal culture, pastoral and pearling traditions and its dramatic landscapes of great biological richness, with important geological and fossil evidence of Australia's evolutionary history.

Koolan Island is located within the boundaries of the West Kimberley and has, therefore, been included in that heritage listing.

Climate

The Buccaneer Archipelago experiences a tropical, sub-humid climate with an annual rainfall of about 959 mm (Bureau of Meteorology, 2023, based on 1948-2014 data from Cockatoo Island, approximately 17 km north, north west of Koolan Island). The 'Wet' season usually extends from December to April, although most rain falls in January, February and March. Little or no rain falls between May and November.

The annual mean daily maximum temperature is 31.3 °C, with an annual mean daily minimum temperature of 25.5 °C. The hottest months are November and December, whilst the coolest is July (Bureau of Meteorology, 2014; based on data 1985-2014). Evaporation is low, at a daily average of 9.2 mm per year (Bureau of Meteorology, 2014).

Topography and Landforms

Koolan Island has an area of 2580 hectares and is located one kilometre from the mainland. It has a Proterozoic sandstone lithology that is expressed in rugged slopes, ridges and uplands mantled with rock scree and shallow skeletal soils. The coast is steep with narrow gullies and frequent embayments and a few beaches (Ecologia, 2005).

Geology

Koolan Island consists of a series of Lower-Proterozoic sediments of the Kimberley Group. The sediments are characterized by tight, asymmetrical folds, striking north-west, south-east, broadly along the long axis of the island. Sandstones, quartzite with lesser phyllites and schists are the dominant geology. The folding on Koolan Island results in three major structural elements: South Syncline, Central Anticline and North Syncline. Pentecost Sandstone forms the majority of the outcrop on the island. This formation is a thinly bedded, intercalated sequence of sandstone and siltstone with minor phyllite. The Pentecost Sandstone is underlain by Elgee Siltstone, a sequence of predominantly mudstones and shales. The Elgee Siltstone is underlain by Warton Sandstone, a unit of interbedded quartzite and siltstone.

Groundwater and Surface water

There are three broad hydrogeological provinces, which correspond to the three main structural geological elements. The central anticline separates the two fresh groundwater regions on the island: the Southern Syncline and the Northern Syncline. Depth to the groundwater aquifers is on average 100-120 metres below ground level. These aquifers experience a recharge of approximately 100,000 (Northern Syncline) and 700,000 (Southern Syncline) kilolitres per year.

The Southern Syncline basin can be subdivided into two zones: the interland zone (or water supply aquifer); and the orebody zone (or orebody aquifer). The orebody aquifer is on the southern limb of the Southern

Syncline and has been exposed in the Main Pit. This aquifer was originally only in hydraulic connection with the sea along strike to the west, however, excavation and push back of the hanging wall has resulted in hydraulic connection with the sea through the wall. The orebody aquifer remains hydraulically isolated from the water supply aquifer by a low permeability Pentecost Formation and an indurated zone at the base of the orebody.

There are no known permanent surface water bodies on Koolan Island, although ephemeral pools and streams are present during and immediately after the wet season.

Flora and Vegetation

A total of 633 flora species (including many subspecies, variations, affinities and hybrids) have been recorded on Koolan Island compiled from surveys dating back to 1995.

Koolan Island is located in the Fitzgerald Botanical District of the Kimberley region of Western Australia (Beard, 1979). The vegetation of Koolan Island has been classified into six broad units shown in Ecologia, 2005 and described as:

1. Open woodland of *Eucalyptus* species over *Corymbia* species

The majority of the island is vegetated by open woodland in which *Eucalyptus miniata* occurs as a taller canopy, with the lower bloodwoods *Corymbia confertiflora* and *Corymbia cadophora* subsp. *cadophora* occurring at variable densities below with a mixed herb ground cover. This unit is further divided into three sub units:

- *Eucalyptus miniata* woodland/Open woodland along stony ridge crests.
- *Eucalyptus miniata* / *Corymbia cadophora* woodland along moderate depth gullies.
- Very open woodland: scattered trees over sparse low shrubs, herbs and grasses on coastal slopes.

2. Vine thicket

Very small areas of vine thicket occur in limited locations. Vine thickets generally intergrade into *Callitris columellaris* forest.

3. Woodland *Callitris columellaris*

The *Callitris columellaris* areas are generally restricted to the more deeply incised gullies and occur in sporadic stands. Hence the total area encompassed is relatively small (Ecologia, 2005).

4. Mangroves

Mangroves occur at the intertidal zone but are largely restricted to narrow strips of vegetation, with only a few of the larger inlets supporting substantive areas.

5. Beaches

There are twelve small beaches that predominantly occur adjacent to mangrove communities but with some mobile sands. The overstorey consists of scattered shrubs and the rest of the complex is mainly comprised of grasses and creepers.

6. Previously disturbed/rehabilitated vegetation

Areas previously disturbed during BHP's mining from 1965 until 1993 on the island consist of rehabilitated areas of open to moderately dense *Acacia* dominated shrublands and non-rehabilitated areas consisting of a variable overstorey with predominantly introduced shrubs, herbs and grasses. Ecologia (2005) recorded that both disturbed vegetation types were atypical of the local provenance vegetation communities across the island and the Kimberley region.

Vegetation and Flora of Conservation Significance

There are no Threatened or Priority Ecological Communities on Koolan Island, nor are there any records of listed Threatened flora under the Biodiversity Conservation Act 2018 or the EPBC Act. Several species of Priority flora have been recorded on Koolan Island:

- *Eragrostis spartinooides* (P3)
- *Jacquemontia sp. Keep River* (P1)

- *Triodia* sp. Hidden Island (P1)
- *Ipomoea tolmerana* subsp. *occidentalis* (P1)
- *Pterocaulon globuliflorum* (P2)
- *Dendrophthoe odontocalyx* (P3)
- *Gymnanthera cunninghamii* (P3)
- *Hibiscus marenitensis* (P3)
- *Stackhousia clementii* (P3)
- *Brachychiton xanthophyllus* (P4)
- *Solanum leopoldense* (P3)

Weeds

A total of 95 introduced flora species (including sub-species and variants) have been recorded on Koolan Island, of which four are Declared Pests under the *Biosecurity and Agriculture Management Act* (2007) based on their threat to agriculture and the environment:

- **Jatropha gossypifolia* (Bellyache Bush) – P1 all WA and P4 Derby-West Kimberley;
- **Senna alata* (Candle Bush) – P1 and P2 all WA;
- **Cryptostegia madagascariensis* (Rubber Vine); P1 and P2 all WA; and
- **Caliotropis procera* (Rubber Bush).

Bellyache Bush and Rubber Vine are both also listed as Weeds of National Significance (WONS) as they pose a significant agricultural, forestry or environmental threat (DoA, 2015). Other weeds that are significant for the Operation are:

- **Passiflora foetida* var. *hispida* (Passion Vine)
- **Leucaena leucocephala* (White Lead Tree)
- **Gliricidia sepium* (Mexican Lilac)
- **Pennisetum pedicellatum* subsp. *unispiculum* (Annual Mission Grass)
- **Hyptis suaveolens* (Hyptis)
- **Arundo donax* (Giant Reed), and
- **Spathodea campanulate* (Africa Tulip Tree).

The majority of introduced flora species occur in the old BHP settlement where former gardens and ornamental plants were established prior to 1993. Some of these species include Century Plant (*Agave Americana*), Common Mango (**Mangifera indica*), Wild Tamarind (**Leucaena leucocephala* subsp. *leucocephala*), Mexican Lilac (**Gliricidia sepium*) and Poinciana (**Delonix regia*).

The most widespread and common introduced species observed during recent annual weed surveys were, Natal Grass (*Melinis repens*) and Stinking Passionflower (*Passiflora foetida* var. *hispida*).

Terrestrial Fauna and Habitat

There are eight fauna habitat types on Koolan Island, of which 'Open Woodland' is the most extensive, occupying 31.89% (824.22 ha) of the island (Stantec, 2023). Other habitat types are 'Eucalypt Woodland on Steep Slopes', 'Rocky Ridge and Outcropping', 'Very Open Woodland', 'Mangroves', 'Gully', 'Beach', and 'Vine Thicket'.

Koolan Island's indigenous fauna is a sub-set of taxa known from the adjacent mainland, although the Yampi blind snake (*Anilius yampiensis*), and the land snails *Kimboraga koolanensis* and *Amplirhagada astuta* appear to be endemic to the island (McKenzie, et al., 1995). Conservation significant fauna recorded on Koolan Island since 1965 are:

- Ghost Bat (*Macroderma gigas*) – EPBC Act and BC Act Vulnerable
- Northern Quoll (*Dasyurus hallucatus*) – EPBC Act and BC Act Endangered
- Pilbara Leaf-nosed Bat (*Rhinioncteris aurantia*) – EPBC Act and BC Act Vulnerable.
- Green turtle (*Chelonia mydas*) – EPBC Act and BC Act Vulnerable

- Hawksbill turtle (*Eretmochelys imbricata*) – EPBC Act and BC Act Vulnerable
- Yampi Blind Snake (*Ramphotyphlops yampiensis*) – DBCA Priority 2
- Gouldian Finch (*Erythrura gouldiae*) – EPBC Act and BC Act Endangered
- Red Goshawk (*Erythrotriorchis radiatus*) – EPBC Act and BC Act Vulnerable
- Australian Humpback Dolphin (*Sousa sahalensis* as *Sousa chinensis*) – EPBC Act Migratory/Marine
- Dugong (*Dugong dugon*) – EPBC Act Migratory/Marine
- Humpback Whale (*Megaptera novaeangliae*) – EPBC Act Migratory/Marine
- Spotted Bottlenose Dolphin (*Tursiops aduncus*) – EPBC Act Migratory/Marine
- Tidepool Pipefish (*Micrognathus micronotopterus*) – EPBC Act Marine.

Introduced Fauna

Four introduced mammals have previously been recorded on Koolan Island; the European Rabbit (*Oryctolagus cuniculus*), Dog (*Canis familiaris*), Goat (*Capra hircus*) and Guinea Pig (*Cavia porcellus*) (McKenzie et al., 1995). These species were introduced by families living on Koolan Island during the BHP era; however, none of these species have been recorded during fauna surveys by Ecologia (2005b, 2006a), MBS (2008, 2009b, 2010, 2011, 2012, 2013), APM (2014; 2018), Phoenix (2021, 2022), Stantec (2021, 2022) or opportunistically by site personnel since operations recommenced in 2018.

Other species recorded on Koolan Island prior to 2006 include the Singapore Ant (*Monomorium destructor*), introduced centipedes, earthworms and slugs. These species are common on both Koolan Island and the mainland and are considered naturalised and non-invasive. The common snail (*Prosopeas achatinaceu*) was recorded in 2005 but has never been recorded in subsequent snail surveys targeting short range endemic snails.

No feral or introduced mammal species are present on the island. The main targets of quarantine measures include Cane toad (*Rhinella marina*), Feral Cat (*Felis catus*), Rat (*Rattus rattus*), Mouse (*Mus musculus*) European Fox (*Vulpes vulpes*) and European Rabbit (*Oryctolagus cuniculus*). Each of these species have a significant environmental impact in the Kimberly and could potentially colonize on the island, despite the absence of permanent surface fresh water. Further information on key threats is provided in Section 3.



QUARANTINE MANAGEMENT PLAN

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Table A-1: Recorded and Potentially Occurring Terrestrial Vertebrate Fauna Species of Conservation Significance on Koolan Island

Species	Status	Likelihood of Occurrence	Recorded on Koolan Island
<i>Burhinus grallarius</i> (Bush Stone-curlew)	P4	Possible though unlikely – Only recorded in 1995	Yes (1995)
<i>Dasyurus hallucatus</i> (Northern Quoll)	Threatened Endangered (EPBC)	Likely due to broad distribution across Koolan Island	Yes (All Years)
<i>Haliaeetus leucogaster</i> (White-bellied Sea-Eagle)	International Agreement Migratory Terrestrial (EPBC)	Likely – commonly recorded during surveys	Yes (1995, 2006, 2008, 2010, 2011, 2012)
<i>Hipposideros stenotis</i> (Northern Leafnosed-bat)	P2	Likely	Yes (2008)
<i>Macroderma gigas</i> (Ghost Bat)	P4	Likely	Yes (1995, 2005)
<i>Merops ornatus</i> (Rainbow Bee-eater)	International Agreement Migratory Terrestrial (EPBC)	Likely – this species is highly mobile	Yes (1995, 2005, 2008, 2010, 2011, 2012)
<i>Ramphotyphlops yampiensis</i> (blind snake (Koolan Is. Yampi Sound))	P2	Only recorded in 1995	Yes (1995)
<i>Rhinonicteris aurantia</i> (Orange Leafnosed-bat)	T	Likely	Yes (1995, 2008, 2010, 2011, 2012)
<i>Erythrotriorchis radiatus</i> Red Goshawk	Vulnerable (EPBC)	Unlikely – Only recorded in 1995	Yes (1995)
<i>Erythrura gouldiae</i> Gouldian Finch	Endangered (EPBC)	Possible – the habitat is suitable and the species was recorded in 1995	Yes (1995)
<i>Pandion haliaetus</i> Osprey	Migratory Terrestrial EPBC	Likely	Yes (2006, 2011, 2012)
<i>Hirundo rustica</i> Barn Swallow	Migratory Terrestrial EPBC	Likely – this species is highly mobile and the species was recorded in 1995	Yes (1995)
<i>Apus pacificus</i> Fork-tailed Swift	Migratory Marine (EPBC)	Likely – this species is highly mobile and the species was recorded in 1995	Yes (1995)

Appendix C: Awareness Posters

DID YOU KNOW?

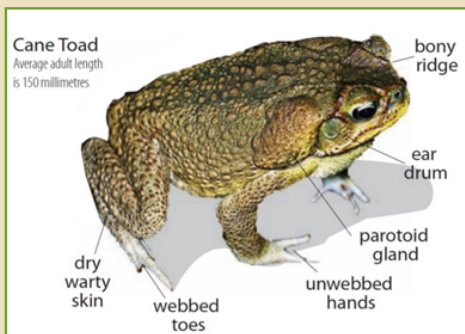
Cane Toads present a significant risk to Koolan Island Fauna

- They are now located in Broome and Derby
- Significant threat to the Northern Quoll and other native fauna

Why are they a problem?

- They compete with native species for food resources and habitat
- Cane Toads are poisonous at all stages of their life and can kill any native animal that eats them

Distinctive Characteristics



What can you do?

- Always follow quarantine rules
- Check your baggage if arriving from Derby
- Report suspected sightings to the Environment Department



Appendix D: Awareness Poster: Declared Weeds

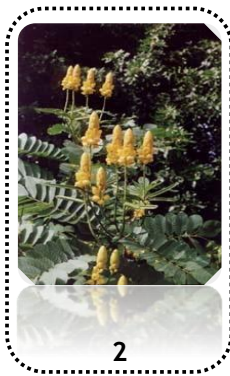
Declared Weeds



There are four species of declared weeds known on Koolan Island and these require removal immediately. If you have seen these plants, please contact the Environment Department.



1. Bellyache bush



2. Candle Bush



3. Rubber Vine



4. Calotrope

Appendix E: Environmental Awareness Handbook content

Quarantine



Quarantine is an important process on KI to ensure invasive pests are not introduced to the Island. KI has a number of unique fauna and flora species which could be wiped out if a pest was introduced or processes such as rehabilitation compromised if weeds were to establish. Human-induced marine and aerial transportation are the primary modes of transport, however natural pathways may also include ocean currents, wind or fauna movements, particularly flying species such as insects, bats and birds. The Enviro Department regularly coordinate inspections of vessels, conduct fauna and flora surveys and weed control, however it is up to everyone to keep an eye out for unfamiliar sightings. Always remember to:

- Check over yourself for seeds / dirt and do not bring up plants
- Report any dirty machinery / equipment arriving to KI
- Report anything suspicious to your Supervisor



Marine Management







As MGI operates on an Island, the marine environment must be taken into consideration to ensure that mining activity does not impact outside the site's footprint or affect the ecological biodiversity of the surrounding area. A number of procedures in place include several monitoring programs that report water quality, metals, nutrients, coral health, marine sediment and introduced marine pests as well as response to marine oil spill incidents. Whales sightings are also recorded as they migrate between June and November.






Appendix F: Declared and Target Weeds

Declared Weeds

Species	Category and Area	Description
<p>Bellyache Bush (<i>Jatropha gossypifolia</i>)</p>  <p>Image: Google web image search</p>  <p>Image: Kenneally et al</p>  <p>Image: Hussey et al</p>	<p>Category 3 (C3) –Management (whole of State). Prohibited.</p> <p>WONS</p>	<p>Native to the Pacific Islands. Perennial erect shrub or small tree to 4 m high. Deciduous in dry conditions. Commonly growing amongst tall trees in sand, loam, clay; occupying river edges and along creeks, gullies and bases of coastal dunes. Leaves are alternate 53-95 mm long, 73-140 mm wide, palmately lobed (three or five lobed, each lobe elliptic), initially purplish but green when mature and sticky. Flowers are predominately red from February to May. Fruit is an oblong lobed capsule 10.5-12 mm long, initially green, ripening dark brown with brown, slightly mottled seeds to 0.8 cm long.</p> <p>References: DAFWA (2013), Hussey <i>et al.</i> (2007), WA Herbarium (Florabase; 1998)</p>
<p>Candle Bush (<i>Senna alata</i>)</p>  <p>Image: Google web image search</p>	<p>Category 3 (C3) –Management (whole of State). Prohibited.</p>	<p>Native to Mexico. Perennial shrub to 3- 4 m tall, prefers open areas, sunlight and often forms thickets. Leaves are alternate, compound, with 8-12 pairs of leaflets. Predominantly yellow or orange flowers from May to July in racemes (unbranched) (150-300 mm long with 20-40 flowers, closely spaced). Fruit pods are straight 125-160 mm long, 8-15 mm wide and ripen black with numerous seeds (up to 60 per pod).</p>

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 <p>Image: Hussey et al</p>		<p>References: DAFWA (2013), Hussey <i>et al.</i> (2007), WA Herbarium (Florabase; 1998)</p>
<p>Rubber Vine (<i>Cryptostegia madagascariensis</i>)</p>  <p>Image: Lee Fontanini, 2009</p>  <p>Rubber vine: declared pest Agriculture and Food</p>	<p>Category 3 (C3) –Management (whole of State). Prohibited.</p> <p>WONS</p>	<p>Native to Madagascar. Perennial shrub to 3 m high if unsupported. Woody climber with vine like stems climbing to 10 m. Found amongst medium trees, tall (sclerophyll) shrubland, grassland; in rocky or stony soil, loam, clay, wet soil; occupying flood plains; dry creek beds. Leaves are opposite 45-88 mm long, 24-52 mm wide, elliptic. Predominately white or pink or purple flowers in February, March, April, May, October, December (fruiting April-May). Flowers in cymes or in umbels (terminal, with one to four clusters). Fruit dehiscent (spontaneous opening at maturity) 82-96 mm long, 17-40 mm wide.</p> <p>References: DAFWA (2013), Hussey <i>et al.</i> (2007), WA Herbarium (Florabase; 1998), Starr <i>et al.</i> (2003)</p>
<p>Rubber Bush (<i>Calotropis procera</i>)</p>	<p>Category 3 (C3) –Management (whole of State). Prohibited.</p>	<p>is an upright branched shrub or small tree usually growing 1 to 4 m tall. The stems and leaves have a waxy appearance and contain a milky sap. Branching stems are greyish-green in colour, smooth in texture, and have a covering of small whitish hairs. Mature stems have a deeply fissured, cork-like, bark that is light brown in colour. The large, relatively thick, leaves (5 to 30 cm long and 4 to 15 cm wide) are also greyish-green in colour and have smooth margins. They are oppositely arranged and have stem-clasping bases or are borne on very short stalks (3 to 4 mm long). These leaves are rounded or oval shaped with shortly-pointed tips. Their</p>

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upper surfaces are mostly hairless, while their undersides may be densely covered in tiny white hairs or have a tuft of stiff hairs at the base of the midrib.

References:

<https://weeds.org.au/profiles/calotrope-rubber-bush-calotropis-rubber-plant-cabbage-tree-kapok-tree-giant-milkweed-indian-milkweed-king-edwards-crown-small-crown-flower/#prosection6>

Target Weeds







Species	Description
<p>Mexican Lilac (<i>*Gliricidia sepium</i>)</p>  <p>Image: Mexican Lilac</p>  <p>Image: Ben Caledonia</p>	<p>Native to Mexico and Central America. Deciduous trees, up to 10 m high, found growing amongst medium trees; occurring in aquatic sites; in wet soil; occupying creeks in woodland areas; growing in disturbed natural vegetation. Leaves alternate (or sub opposite), spiral, compound (with 7-17 leaflets), pinnate, leaflet blade 45-62 mm long, 20-30 mm wide. Flowers arranged in inflorescences, in racemes; predominantly pink or purple, in July and November. Fruit is dehiscent 150-230 mm long, 12-20 mm wide.</p> <p>References: Hussey <i>et al.</i> (2007), WA Herbarium (Florabase; 1998)</p>
<p>White Lead Tree (<i>Leucaena leucocephala</i>)</p> 	<p>Native to tropical America. Erect or spreading trees or shrubs, up to 6 m high found growing amongst low trees in sand, loam, clay (calcareous), red gravel; occupying foreshores, creek lines, margins of rivers and mangrove swamps, monsoon forest among coastal dunes, roadsides, drains; growing on irrigated land. Leaves are alternate, spiral, compound, bipinnate (pinnae in 3-10 pairs, leaflets in 5-20 pairs), 11-21 mm long, 2-5 mm wide. Flowers arranged in heads (dense, globular, pedunculate, 12-20 mm in diameter; 1-3 peduncles in leaf axils; sometimes in terminal racemes); predominately white in May and June, however flowers have been recorded throughout the year. Fruit dehiscent 90-225 mm long, 4.5-20 mm wide.</p> <p>References: Hussey <i>et al.</i> (2007), WA Herbarium (Florabase; 1998), SEWPAC (2013)</p>
<p>Wild passionfruit / Passion flower (<i>Passiflora foetida</i> var. <i>hispida</i>)</p>	<p>Native to South America and West Indies. Climber, vigorous lianas with tendrils, up to 9 m high, growing amongst medium trees (and in herblands, vine thickets). Leaves alternate, spiral, 47-105 mm long, 43-100 mm wide, dissected, palmately lobed (three-lobed, with the central lobe longest). Flowers solitary, predominantly green or white or cream or purple in February to June, August and November. Fruit indehiscent, a yellow or orange, berry (globular to ovoid), 19-40 mm wide (diameter).</p>



Image: WA Herbarium(1998-)

References: Hussey *et al.* (2007), WA Herbarium (Florabase; 1998), SEWPAC (2013)

<p>Giant Reed (<i>Arundo donax</i>)</p>  <p>Image: WA Herbarium(1998)</p>	<p>Native to southern Europe and Asia. A robust perennial grass often incorrectly called bamboo. It has woody stems and grows to 6 m in height from a stout, creeping, woody rhizome. Occurs in moist areas and along watercourses where it can spread quickly forming thick homogenous stands. Leaves are evenly spaced in two rows along the stem. The inflorescence is a large, fluffy panicle, dense and erect to 60 cm long produced from April to June.</p> <p>References: Hussey <i>et al.</i> (2007), WA Herbarium (Florabase; 1998)</p>
<p>Hyptis (<i>Hyptis suaveolens</i>)</p>  <p>Image: Mount Gibson, 2009</p>	<p>Native to the Philippines. Annual or perennial, broad-leaved, erect, strongly aromatic (minty) herb, up to 3 m high. Found growing in a variety of habitats including amongst trees, pindan, spinifex grassland; creek and river banks, campsites, or on bare areas. Leaves opposite, decussate, simple, hairy 23-60 (up to 106) mm long, 18 -45 (up to 75) mm wide, stems square in cross-section, semi-woody. Flowers arranged in spikes (flowers in whorls, inflorescence units 2-5 flowered cymes); predominantly purple or blue, between March and August. Fruit separating into four nutlets, non-fleshy, 3.5-4 mm long, 2-2.5 mm wide.</p> <p>References: Hussey <i>et al.</i> (2007), WA Herbarium (Florabase; 1998)</p>
<p>Annual Mission Grass (<i>Cenchrus pedicellatus</i> subsp. <i>unispiculus</i>)</p>  <p>Image: Lee Fontanini, 2009</p>	<p>Tufted grass, annual or sometime perennial, 0.4-1.5 m high. Found in sandy clay, lateritic gravel of creeks and disturbed habitats. One spikelet within each involucre. Flowers are woolly-hairy, red, brown, and white in winter from May to July.</p> <p>References: WA Herbarium (Florabase; 1998)</p>

African Tulip Tree (*Spathodea campanulata*)

References: Department of Primary Industry and Fisheries, Queensland (2007).



Image: DPI&F QLD

Native to Africa, this fast-growing, evergreen tree grows quickly to 24 m. It has broadly oval shaped leaves, deep glossy green when mature. The flowers are large and orange-red with yellow frilled edges. Seed capsules are reddish brown and up to 20 cm in length.

This species is invasive in Northern Territory, Queensland and Christmas Island and many islands and other areas of the Pacific Ocean region.

References: Hussey *et al.* (2007), WA Herbarium (Florabase; 1998)



Appendix G: Template of the ground disturbance permit (GDP)



MOUNT GIBSON IRON – KOOLAN ISLAND	 Mount Gibson Iron
GROUND DISTURBANCE PERMIT MGX-HSEC-KI-FR-0003	

This form must be completed by the MGX representative responsible for the site work (Permit Issuer) or the Environment Section (Permit Authoriser) at least TWO days prior to commencement of work.

The person accountable for the execution of this permit (Permit Holder) is to counter sign this permit. Work must not proceed until final approval from the Environment Section is granted.

GDP No: 24XX

Requested by (Permit Issuer):	Department:	Date:
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SECTION 1: Description of proposed works (to be completed by Permit Issuer)

Area Name: _____	Coordinates: _____
See attached: <input type="checkbox"/> Aerial photograph(s) <input type="checkbox"/> Map(s) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Spatial File(s)	
Specific Location Details: Area to north of existing plant with previous disturbance area and some new areas	
Proposed disturbance takes place in: <input type="checkbox"/> Newly disturbed area <input type="checkbox"/> Rehabilitated area <input type="checkbox"/> Previous Disturbance	
The site work will involve:	
Proposed commencement date:	Area approved for disturbance (ha):
Topsoil Volume (m ³):	
Proposed equipment for works:	
MAP	

SECTION 2: Environmental and Heritage Assessment

The Environment Section is to assess the proposal against the following criteria, if any of the following considerations are pertinent check YES and provide further details including proposed actions and/or reasons for refusal to the Permit Issuer.

Assessment Considerations	Yes	No	Details and Action
APPROVALS			
EP Act 1986 - Part V Approval (DWER) Is the disturbance located within prescribed premises boundaries? Is there a change to the approved land use activity?			Within prescribed premises boundary Category 54 – Sewage facility
EP Act 1986 - Part IV Approval (EPA) Is the disturbance located within the approved MS boundary?			Directly adjacent to boundary. Survey pegs at 1m intervals and spotter to be used to prevent impact over boundary.
Mining Act 1978 - Mining Proposal / POW (DMIRS) Is the disturbance located within approved boundaries? Is there a proposed land use change?			Directly adjacent to boundary
EPBC Act 1999 referral (DCCEEW) Does the proposed disturbance affect the current approval or require referral under the EPBC Act?			Within boundary
Is Shire / Other Approval required?			Shire and Department of Health approval received 31 Jan 2024
Heritage/Aboriginal Sites Is the disturbance located in or near a known or registered Heritage site?			
Traditional Owner permission granted			



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Pre- Clearance Survey Has pre-clearance survey been completed within the last 5 years?			Area has been surveyed in recently. No issues in regards to these particular locations (single trees and windrow removal)
Mining Tenement(s)			

MGX-HSEC-KI-FR-0003 Ground Disturbance Permit	Date Effective: X/07/2023	Set Review: Three Yearly	Revision: Issue 4	Planned Review: X/07/26	Page 1 of 4
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ASPECTS			
Exploration or Drilling Activity What size pad is required? What spill management is in place?			
Fauna /Northern Quoll pre-clearance survey Does the area require two nights of trapping?			
Priority Flora Is there any priority flora located within or near the disturbance area?			
Topsoil / Rehabilitation Management Can topsoil be recovered? Is it contaminated with weeds? Where shall the topsoil be stockpiled?			
Weed Management Are weeds present? If so what species? What management is required to reduce potential spread?			Minor grass weeds – to be removed to landfill due to other contaminants in soil (rubbish, pickets, concrete)
Contaminated Sites Is the area located in a known or potentially contaminated area?			Considered due to location potential. Soil location to be
Marine Management Is there potential for run off or disturbance to coral or the seabed?			
Fire Management Is there the potential for ignition or bushfire? Is the clearing location near flammable or explosive materials?			
Surface Water/Sediment Management Does the disturbance area contain any natural surface water drainage lines? Does the current surface water management require changing? Are sediment basins required?			
Erosion (tracks, roads, slope design)			
Groundwater Are groundwater bores present?			
Quarantine Does the equipment require inspection for weeds/seeds post clearing?			
Dust / Air emissions			Minor dust on movement of soil. Low risk based on location and volume of soil
Waste material			
Other services and supporting infrastructure (culverts, pipes, power)			Other services have been marked up / aware of by Survey.
Area to be flagged by survey			
CULTURAL HERITAGE RANGER Inspection			
Ranger Approval <input type="checkbox"/>	Reason for non-approval:	Name:	Signed: Date:
ENVIRONMENT DEPARTMENT TO COMPLETE			
GDP Granted <input type="checkbox"/>	Reason for non-approval:	Name:	Signed: Date:

SECTION 3: Conditions and Acceptance

This Permit is granted under the following conditions. If Topsoil recovery or Quoll clearing is exempted a reason must be provided above.

Conditions	Permit Holder Confirmation	Permit Authoriser Confirmation
Generic Conditions		
<ul style="list-style-type: none"> This GDP must be signed and approved prior to any ground disturbance activity taking place. By signing this GDP, the Permit Holder agrees to abide by the conditions set. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

<ul style="list-style-type: none"> The clearing boundary must be set out and clearly understood by Permit Issuer and Permit Holder prior to clearing and communicated to Operators Any breach of GDP boundaries or conditions set under the permit must be reported immediately. All incidents and hazards are to be immediately reported. The Permit Holder is to seek a post disturbance inspection and sign off from the Environment Department at the end of works in order to close out the permit. 	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
<p><u>Additional Conditions and Exemptions</u></p> <ul style="list-style-type: none"> No material is to be pushed outside of the boundary including vegetation Once cleared, the material to be removed should be removed to landfill due to potential contamination (concrete etc) Due to the slope, material on boundary line should be reinforced with retaining bricks to prevent collapse onto the pad A Spotter shall be used to prevent incursion over the boundary 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Permit Approval

The conditions outlined in this GDP have been understood and accepted by the Permit Issuer and Permit Holder.

Approval is granted:	Name: _____	Sign: _____	(Permit Authoriser)	Date: _____
Conditions are accepted	Name: _____	Sign: _____	(Permit Issuer)	Date: _____
Conditions are accepted	Name: _____	Sign: _____	(Permit Holder)	Date: _____

