PENTIUM WATER

KARIYARRA WATER SCHEME

Greater Bilby Management Plan

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Executive Summary

Kariyarra Water Scheme

Vysarn Asset Management (VAM), in partnership with Kariyarra Aboriginal Corporation (KAC), as the Registered Native Title Body Corporate (RNTBC), have a 50:50 joint venture, know as the Kariyarra Water Joint Venture (KWJV), to develop water schemes on Kariyarra Country. This is the practical embodiment of "closing the gap" – a Traditional Owner, jointly owned, operated, and managed business that advances the interests of Western Australia and all its peoples.

The KWS project's key hydrogeological approvals were initiated by submitting a 5C licence application to the Department of Water and Environmental Regulation (DWER) in August 2023 per the *Right in Water and Irrigation Act 1914* (RiWI Act). The 5C application was specific to groundwater abstraction from the Kariyarra paleochannel aquifer (the aquifer). The proposed borefield is to be located across the borders of Indee Station and Kangan Station, approximately 100 kilometres (km) south of Port Hedland. The borefield area totals approximately 9,830 hectares (ha). In June 2024, DWER issued a 26D licence approval to the KWJV. The 26D licence allows for the drilling and hydrogeological testing of the aquifer.

Construction of production and monitoring bores are required to complete aquifer testing, hydrological modelling, and the subsequent Detailed Hydrogeological Assessment Report (or H3 assessment).

Native Vegetation Clearing Permit

The KWS project requires constructing production and monitoring bores, and access tracks at specific spatial locations over the aquifer, essentially along the northern boundary of Kangan Station and the southern boundary of Indee Station, to complete the H3 report. The H3 assessment requires a detailed hydrogeological evaluation, including drilling, test pumping and groundwater modelling.

The proposed clearing area totals 9.8 ha. The clearing areas (consisting of production and monitoring bore pads, and access tracks) are located at discrete (i.e., spatially non-contiguous area) locations across the larger proposed borefield area (which totals approximately 9,830 ha). The discrete clearing consists of the following areas:

- 24 production bore drilling pads (totals 2.9 ha)
- 33 monitoring bore pads (totals 1.9 ha)
- 4 m wide access tracks at limited locations (totals 5 ha)

The vegetation clearing for the production bores (and some monitoring bores) and access tracks will be permanent to ensure the bores' safe and effective operation and maintenance.

Greater Bilby Management Plan

Purpose

This Greater Bilby Management Plan (GBMP) aims to mitigate and minimise environmental impacts from clearing 9.8 ha of individual Greater Bilby that may be present during the estimated two-week clearing program. The GBMP identifies management criteria, monitoring procedures, and reporting requirements for the duration of the clearing program. The specific environmental values addressed in this GBMP are as follows:

- Greater Bilby (*Macrotis lagotis*): protected under the *Biodiversity Conservation Act 2016* (BC Act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

This GBMP aligns with the Commonwealth Recovery Plan for the Greater Bilby (Commonwealth of Australia, 2023) and the Environmental Protection Authority's (EPA) Environmental Factor Guideline for Terrestrial Fauna.

Management Framework Summary

The fauna surveys completed across the proposed borefield (northern portion of Kangan Station and southern portion of Indee Station) targeted the Greater Bilby species.

The fauna surveys did not identify any signs of Greater Bilbies within or around the 9.8 ha native vegetation clearing boundary (Umwelt 2023; Ecology Matters 2024). However, the fauna survey and associated assessment confirmed:

- Suitable habitat (specifically Spinifex Sandplain) for the Greater Bilby species in the local region. The mapped extent of Spinifex Sandplain surveyed across the Indee and Kangan Stations totals 23,374 ha (22,162 ha within portions of Indee Station and 1,212 ha in the northern portion of Kangan Station.
- No signs of Greater Bilby were observed in the fauna surveys. However, secondary signs (old burrows) were recorded in the De Grey Hemi Gold Mine (Indee Station) proposal area near the Yule River. These old burrows are approximately 10 km from the 9.8 ha clearing boundaries.

Considering the presence of potential habitat, combined with the species' nomadic and cryptic nature, impacts on Greater Bilby are still possible. In response, this GBMP sets out specific management actions, including:

- Pre-clearance surveys to identify Greater Bilby within the approved 9.8 ha clearing boundaries.
- The relocation of any individuals recorded during pre-clearance surveys.
- The slow, progressive one-directional clearing allows the Greater Bilby to move into adjacent habitat ahead of the clearing activity.
- The requirement to obtain a fauna licence pursuant to the *Biodiversity Conservation Regulations 2018*.

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1. Introduction

1.1. Project Context

The Kariyarra Water Scheme (KWS) is a project by the Kariyarra Joint Venture (KWJV), a 50:50 partnership between Kariyarra Aboriginal Corporation (KAC) and Vysarn Asset Management (VAM). The KWS aims to supply water from the Kariyarra paleochannel aquifer to future industrial users in Port Hedland's Boodarie Strategic Industrial Area (BSIA). It is the only available water resource for the BSIA in the short to medium term, supporting major proposals, including POSCO's Port Hedland Iron (PHI) Project and BP's Australian Renewable Energy Hub (AREH).

Implementing the KWS project would provide significant economic opportunities for the Kariyarra People, offering long-term social and economic benefits.

1.2. Project Description

The KWS water source is the Kariyarra paleochannel aquifer (the aquifer), located about 100 km south of Port Hedland on Kariyarra country. It spans the northern part of Kangan Station (LPL N049839) and the southern part of Indee Station (LPL N050012) between the Turner and Yule River systems.

The KWS project requires the construction of groundwater production and monitoring bores and associated access tracks at specific spatial locations across a 9,830 hectares (ha) area which overlays the aquifer located along the northern boundary of Kangan Station and the southern boundary of Indee Stations. The construction of production and monitoring bores is required to complete aquifer testing, hydrological modelling, and the subsequent Detailed Hydrogeological Assessment Report (or H3 assessment).

Figure 1 illustrates the spatial location of the groundwater production and monitoring bores and associated access tracks.

1.2.1. Description of Action

The construction of the groundwater production and monitoring bores and associated access tracks requires clearing 9.8 ha of native vegetation. The discrete clearing consists of the following areas:

- 24 production bore pads (totals 2.9 ha)
- 33 monitoring bore pads (totals 1.9 ha)
- 4 m wide access tracks at limited locations (totals 5 ha)

The vegetation clearing for the production bores and monitoring bores and access tracks will be permanent to ensure safe and effective operation and maintenance.

Table 1 details the specific clearing boundaries (i.e., the location of the production bores, monitoring bores, and access tracks) within the Indee and Kangan Stations.

Table 1: KWS Project Summary

Clearing Area	Location	Local Government	Land Use
7.6 ha	Kangan Station (LPL N049839)	Town of Port Hedland (ToPH).	• Pastoral (cattle grazing) • Mining activities, including mineral exploration associated with De Grey's Hemi Gold Mine.
2.2 ha	Indee Station (LPL N050012)		
Permit Characteristics			
Purpose of the permit		Clearing for the construction of production bores, temporary monitoring bores, and access tracks required to complete a DWER H3 assessment of the paleochannel aquifer.	
Clearing Area Details		**Kangan Station**	**Indee Station**
		17 production bore (2.1 ha) 19 monitoring bores (1.1 ha) 4.4 ha access track	7 production bore (0.8 ha) 14 monitoring bores (0.8 ha) 0.6 ha access track
Clearing Duration		≤ two months	

1.2.2. Key Construction Activities

The clearing works consist of the following key activities:

- Clearing native vegetation within the approved 9.8 ha area.
- Native vegetation will be cleared over approximately two weeks (for production bore pads, monitoring bore pads, and associated access roads). Post the clearing for the production bore pads, monitoring bore pads, and associated access roads, the bores will be constructed.

1.2.3. Construction hours

Construction works will adhere to the following construction hours:

- 6.00 am to 6.00 pm.

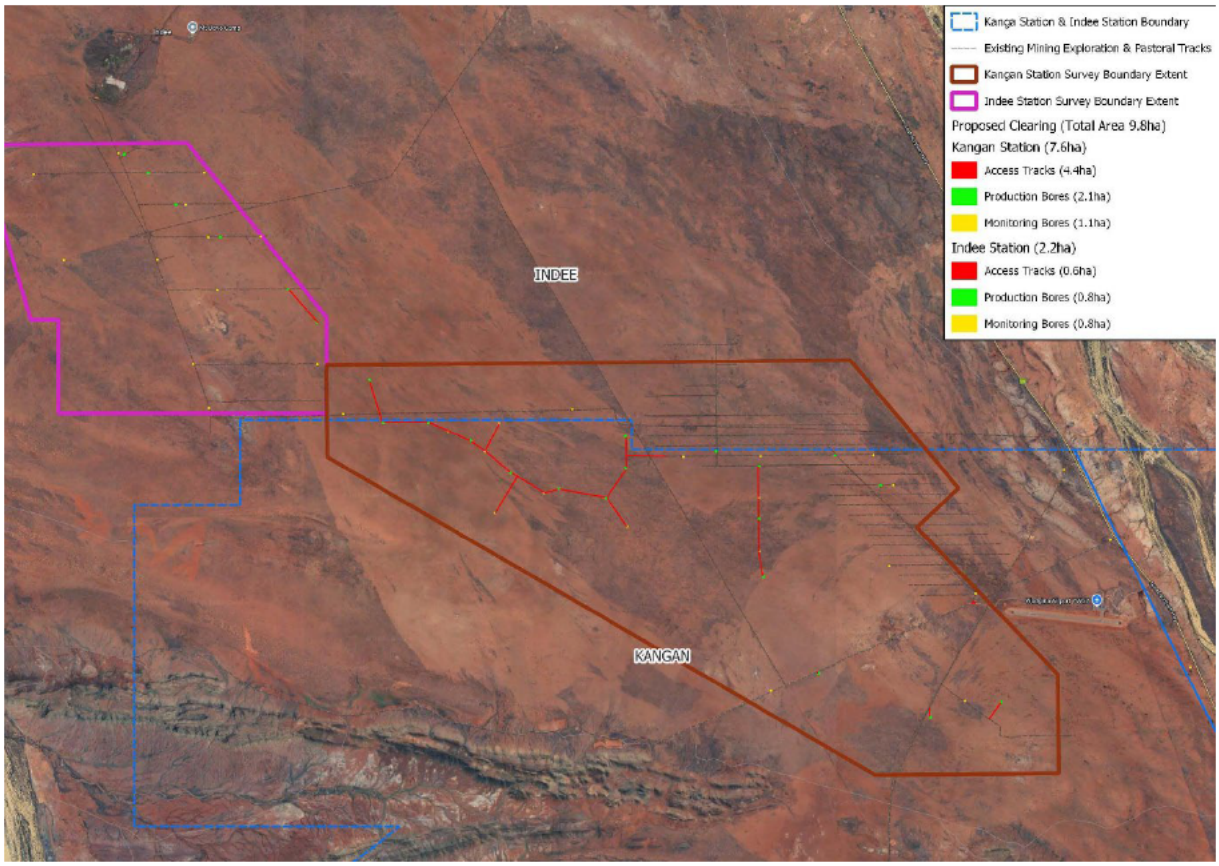

Figure 1: KWS Production and Monitoring Bores and associated Access Road

1.3. Purpose of Management Plan

This GBMP aims to mitigate and minimise environmental impacts from clearing 9.8 ha on individual Greater Bilby that may be present during the estimated two-week clearing program. The GBMP identifies management criteria, monitoring procedures, and reporting requirements for the duration of the clearing program. The specific environmental values addressed in this GBMP are as follows:

- Greater Bilby (*Macrotis lagotis*): protected under the *Biodiversity Conservation Act 2016* (BC Act) and the EPBC Act.

This GBMP aligns with the Commonwealth Recovery Plan for the Greater Bilby (Commonwealth of Australia, 2023) and the EPA guideline for Terrestrial Fauna.

1.4. Greater Bilby Recovery Plan

Greater Bilby is listed as 'Vulnerable' under the EPBC and BC Acts.

Key threats to the Greater Bilby include (Woinarski et al. 2014):

- Introduced predators (foxes and cats)
- Too-frequent fires
- Predation by dingoes and dogs
- Habitat degradation from weeds, rabbits and livestock
- Loss of habitat or fragmentation from activities such as agriculture or mining related land use
- Reduction in population resilience and genetic fitness in wild and intensively managed populations.

The Recovery Plan for the Greater Bilby aims to halt the decline and support the recovery of the Bilby population to maximise the chances of long-term survival in nature (Commonwealth of Australia, 2023).

The Recovery Plan includes research, conservation and management actions that will be implemented within a monitoring framework to evaluate the impact of these management efforts. It also aims to provide effective governance and coordination, establish and maintain monitoring and surveys, and conduct research to inform management strategies.

The Recovery Plan has four key objectives. Each of these four objectives has specific performance criteria. The recovery objective and performance objectives include (Commonwealth of Australia, 2023):

- **Objective 1:** The size of the Greater Bilby population has grown.
- **Objective 2:** The extent of occurrence and area of occupancy of the Greater Bilby has been maintained or increased.
- **Objective 3:** The genetic diversity of the Greater Bilby has been maintained and retains the potential for evolutionary change through adaptation and selection.
- **Objective 4:** Indigenous organisations, communities, and individuals have a more significant role in bilby conservation.

1.4.1. Environmental Factor

The Environmental Protection Authority's (EPA) objective for the Terrestrial Fauna Environmental Factor is "to protect terrestrial fauna so that biological diversity and ecological integrity are maintained".

The avoidance and management measures embedded in the native vegetation clearing permit and this management plan in response to the EPA's Terrestrial Fauna Environmental Factor focuses on:

- Avoiding and minimising the direct and indirect impact of the proposal on the key Greater Bilby habitat - Spinifex Sandplains.

1.5. Technical Surveys

The following baseline surveys underpin the GBMP:

- The De Grey Hemi Gold Mine ecological surveys across the Indee Station (IBSA Number: IBSA-2024-):
    - Umwelt. (2023). Hemi Gold Deposit: Baseline Flora and Vegetation Assessment.
    - Western Wildlife. (2023). De Grey Hemi Gold Project: Detailed Vertebrate Fauna Survey 2021 - 2022.
    - Western Wildlife. (2024). De Grey Hemi Gold Project: Vertebrate Fauna Surveys 2021 - 2024.
- The KWS project ecological surveys across the Kangan Station (IBSA Number: IBSA-2024-0541):
    - Emerge Associates (2024) Technical Memorandum Detailed Flora and Vegetation Assessment Kangan Station Bore Field.
    - Emerge Associates (2024) Detailed Flora and Vegetation Assessment Kangan Station Northern Pipeline.
    - Ecological Matters (2024) Kangan Station and Northern Pipeline Terrestrial Vertebrate Fauna Assessment.

The baseline flora, vegetation and fauna surveys commissioned by De Grey Mining and for the KWS were completed in accordance with the following Environmental Protection Authority (EPA) guidelines:

- Technical Guidance: Terrestrial Fauna Surveys (EPA 2016).
- Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016).

1.6. Proponent

The KWS project is managed and delivered by the Kariyarra Joint Venture (KWJV) under a 50:50 partnership between KAC and VAM.

The key contact for this proposal is:

Mr Daniel Hay-Hendry

Project Manager - Vysarn Asset Management

[redacted]

2. Approval Framework

2.1. *Environmental Protection* (Clearing of Native Vegetation) *Regulations 2004*

The KWS project's key hydrological approvals were initiated by submitting a 5C licence application to the Department of Water and Environmental Regulation (DWER) in August 2023 per the *Right in Water and Irrigation Act 1914* (RiWI). The 5C application was specific to groundwater abstraction from the paleochannel aquifer. In June 2024, DWER issued a 26D licence approval. The 26D licence allows for the drilling and hydrogeological testing of the aquifer.

A Purpose Permit application under section 51E(1) (or Part V) of the EP Act to clear 9.8 ha of native vegetation to construct production bores, monitoring bores, and associated access tracks was submitted to DWER in February 2025. Construction of production and monitoring bores is required to complete aquifer testing, hydrogeological modelling, and the subsequent Hydrological Assessment Report (or H3 assessment).

Accordingly, the 9.8 ha clearing area would be implemented in accordance with the following approvals

1. The Purpose Permit approval under Part V of the EP Act
2. This GBMP.

2.2. Roles and responsibilities

The clearing work will be conducted in accordance with this GBMP. Table 2 presents the key roles relevant to implementing the Purpose Permit approval and the GBMP.

Table 2: Environmental Management Roles

Role	Responsibilities

KWS Project Manager	• Responsible for the implementation of the KWS project, including:
	  ○ Compliance with the Purpose Permit approval under Part V of the EP Act.
	  ○ Compliance with GBMP.
	  ○ The securing of the environmental/ecological advisor and construction contractors.

Senior Field Services Personnel	• Provide adequate supervision to site personnel and contractors to ensure compliance with this Plan. • Ensure adequate resources are readily accessible during an environmental incident. • Communicate any non-compliance to this GBMP.
Environmental/Ecological Advisor	• Ensure relevant regulatory permits & approvals are in place before clearing work commences. • Undertake Greater Bilby monitoring in accordance with this Plan. • Review environmental incidents, hazards, and non-conformances, ensuring adequate corrective and preventative actions.
Construction Contractor	• The Construction Contractor is responsible for meeting the environmental obligations in this GBMP. • Attend induction/briefings are provided to all personnel and contractors. • Ensure all incidents are reported and communicated with the KWS Project Manager.

3. Greater Bilby Regional and Local Context

3.1. Greater Bilby Habitat

3.1.1. Regional Context

The range of the Greater Bilby extends from the inland regions of the Northern Territory to Northern and Central Western Australia, with one small known population in southwest Queensland. The remaining populations of the Greater Bilby occupy three main habitats (Commonwealth of Australia, 2023):

- Open tussock grassland on uplands and hills.
- *Acacia aneura* (mulga) woodland/shrubland growing on ridges and rises.
- Hummock grassland in plains and alluvial areas.

The Greater Bilby habitat varies significantly, so a single definition of their preferred or critical habitat is impossible (Commonwealth of Australia, 2023). An interim guide to determining habitat critical for the survival of the Greater Bilby includes:

1. Any area where the species is known or likely to occur, as shown on the distribution map on the Greater Bilby Species Profile and Threats (SPRAT) Database.
2. Any location outside the known or likely distribution where Greater Bilbies are found to occur.
3. Any area between the areas noted above that may be periodically occupied by Greater Bilbies.
4. Any area in which Greater Bilbies may naturally colonise or may feasibly be reintroduced.

3.1.2. Local Context

A review of the Department of Biodiversity, Conservation and Attraction's (DBCA's) Threatened and Priority Fauna database confirmed records of the Greater Bilby in proximity to the 9.8 ha clearing areas.

The fauna surveys completed for the De Grey Hemi Gold Mine within the southern portion of Indee Station (Western Wildlife) and the northern Kangan Station (Ecology Matters) confirmed the following outcomes specific to the Greater Bilby habitat:

- Spinifex Sandplain was the dominant fauna habitat surveyed and mapped in the northern Kangan Station (Ecology Matters) and the De Grey Hemi Gold Mine proposal undertaken within the southern portion of Indee Station (Western Wildlife).
- The critical habitat for the Greater Bilby at a local level is not well understood but is likely to include the following mapped habitat areas:
    - Spinifex Sandplain
    - Sand Dune/Gravel Rise
    - Sandplain Drainage
- The 9.8 ha clearing areas are located entirely within the surveyed and mapped Spinifex Sandplain habitat area.
- The Greater Bilby was expected to be a regular visitor to the local area.

No evidence of the Greater Bilby was observed during field investigations within the northern portion of Kangan Station; however, secondary signs (old burrows) were recorded in the De Grey Hemi Gold Mine (Indee Station) proposal area, particularly near the Yule River. These old burrows are approximately 10 km from the 9.8 ha clearing boundaries.

Plates 1 and 2 illustrate the Spinifex Sandplain habitat, as recorded within the northern portion of Kangan and Indee Stations.

Plate 1: Spinifex sandplain in the northern portion of Kangan Station (Ecology Matters 2024).

Plate 2: Spinifex sandplain in Indee Station (Umwelt 2023)

Plates 3 and 4 illustrate other mapped habitats, namely Sandplain Drainage and Sand Dune, that the Greater Bilby could use within the northern portion of Kangan and Indee Stations.

Plate 3: Sandplain Drainage in Indee Station (Umwelt 2023)

Plate 4: Sand Dune in Indee Station (Umwelt 2023)

Plate 5 illustrates the recorded old Greater Bilby burrows near the Yule River (approximately 10 km from the 9.8 ha clearing areas).

Plate 5: Old Greater Bilby Burrows in the Sand Dune habitat within Indee Station (Umwelt 2023)

Figure 2 illustrates the surveyed and mapped fauna habitat (Spinifex Sandplain) within the northern portion of Kangan State and the southern portion of Indee Station.

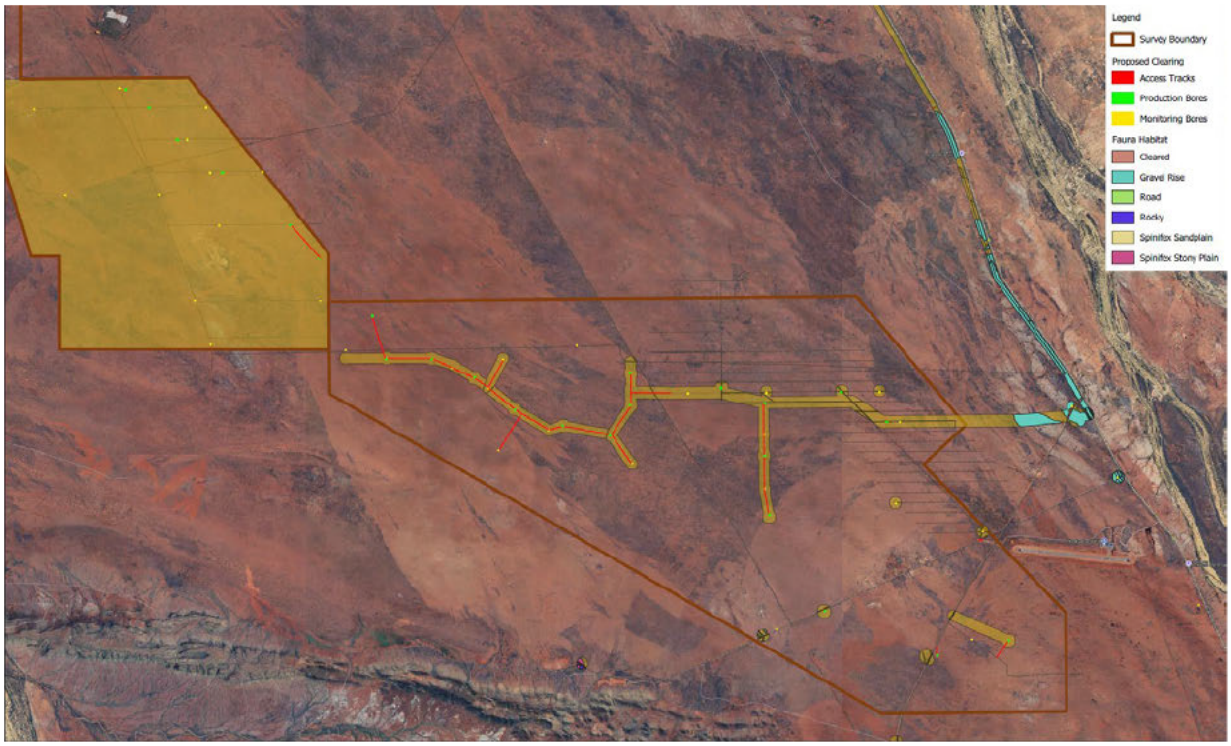

Figure 2: Kangan and Indee Stations - Mapped Fauna Habitat

4. GBMP Actions Targets and Monitoring

4.1. Key Assumptions

Key assumptions of this GBMP include:

- Fauna surveys have accurately recorded the nature of the presence of Greater Bilby and identified habitat values.
- Fauna surveys accurately reported the distribution of the Greater Bilby.
- Access to the 9.8 ha clearing areas within Kangan and Indee Station will be via existing pastoral and/or mining exploration tracks.
- The 9.8 ha clearing program will be implemented over approximately two weeks.

4.2. Potential Impacts

A key element of this management plan was the identification of the potential direct and indirect impacts on Bilby caused by the clearing of 9.8 ha of Spinifex Sandplain habitat across a two-week period. The potential impacts to the local Greater Bilby population from the implementation of the 9.8 ha clearing program include:

- **Direct Impacts**
  - Loss of habitat
    - The mapped extent of Spinifex Sandplain surveyed across the Indee and Kangan Stations totals 23,374 ha (22,162 ha within portions of Indee Station and 1,212 ha in the northern portion of Kangan Station).
    - The clearing area represents less than 0.05% of the local region's Spinifex Sandplain habitat.
  - Vehicle strike
    - There will be increased vehicle movement along the northern boundary of Kangan Station and the southern portion of Indee Station during the clearing and construction of the production and monitoring bores phase, consequently increasing the likelihood of vehicle strikes on the Greater Bilby.
- **Indirect Impacts**
  - Weed Invasion
    - Weeds have the potential to disperse during construction due to the clearing of native vegetation and increased vehicle movements. Increased weed burdens in the Greater Bilby habitat can prevent seedling recruitment of native plant species, potentially reducing the habitat and food resources available to the Greater Bilby.
  - Fire
    - Fire can reduce vegetation cover (including foraging resources for the local Greater Bilby population) and increase predation pressures.

4.3. Management Actions

Table 3 addresses the environmental management actions that will be implemented during the clearing program to achieve the objectives set under:

- Recovery Plan for the Greater Bilby (Commonwealth of Australia, 2023).
- Environmental Factor Guideline: Terrestrial Fauna (EPA 2016).

These actions are focused on avoiding adverse impacts on Greater Bilby resulting from the clearing activities and the construction of the bores.

Table 3: Greater Bilby Management Plan

Management Objective	Key Management Action	Management Target	Monitoring	Reporting
Greater Bilby Management				
Avoid and minimise clearing impacts on the Greater Bilby habitat.	• **Pre-clearing survey:** o Conduct a Greater Bilby survey before clearing activities. o Relocate individuals if necessary. • **Minimise:** o Induction training on the potential presence of Greater Bilby. o A suitably qualified fauna spotter to be present during land clearing activities, where required. o Restrict clearing to the Purpose Permit-approved boundaries. o The slow, progressive one-directional clearing allows the Greater Bilby to move into adjacent habitat ahead of the clearing activity. o Boundaries of areas to be cleared or disturbed will be identified by Global Positioning System (GPS) coordinates, and boundary maps will be provided to dozer operators. o Clearing boundaries will be clearly marked on construction documents and within the field. o Vehicles and machinery to remain on approved and/or existing tracks to reduce soil compaction. • **Pre-clearing Greater Bilby survey:** o A pre-clearing survey for Greater Bilby underpins the implementation of this plan. The following standard Greater Bilby survey techniques will be employed: ▪ Searches by a fauna specialist/ecologist for signs, including scats, tracks, burrows and diggings in suitable Greater Bilby habitats within and adjacent to the approved clearing area boundaries.	• No clearing outside development envelopes. • No harm or loss of Bilby individuals. • No soil compaction or erosion in retained habitat.	• Monitoring of vegetation clearing boundaries. • Monitoring of Greater Bilby's before the commencement of clearing activities. • Monitor and demark any Greater Bilby burrows.	• Record the GPS data and hectares of vegetation cleared. • Report non-compliance to DWER and DBCA (Pilbara region branch) within seven days. • Where Greater Bilbies are identified and relocated, the fauna specialist/ecologist shall include the following in a report: o The location of any Greater Bilbies, GPS unit set to Geocentric Datum Australia 1994/2020 (GDA94/2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees. o The date, time, vegetation type, weather conditions at each location

Management Objective	Key Management Action	Management Target	Monitoring	Reporting
	○ Where evidence of recent burrow use is identified, the following actions will be undertaken: ▪ The fauna specialist/ecologist will flag the location of the active Greater Bilbies burrow(s) showing signs of recent use. ▪ No clearing within five (5) metres of the flagged burrow(s). ▪ Monitor the flagged burrow(s) with cameras for a maximum of five days or until Greater Bilbies have been observed moving on from the burrow(s) independently. ▪ The fauna specialist/ecologist will remove and relocate any Greater Bilby found to an area of suitable habitat in accordance with their fauna licence. ○ Where Greater Bilbies are identified and relocated, the fauna specialist/ecologist shall include the following in a report: ▪ Scientific name and gender of each Greater Bilby captured ▪ The location of any Greater Bilbies GPS unit. ▪ The date, time, vegetation type, weather conditions at each location where Greater Bilbies is captured and relocated, and the position of the relocated area using a GPS unit. ▪ The name of the fauna specialist that relocated Greater Bilbies under the condition of a copy of the fauna licence authorising the relocation of fauna.			where Greater Bilbies is captured and relocated, and the position of the relocated area using a GPS unit. ○ The name of the fauna specialist that relocated Greater Bilbies under the condition of a copy of the fauna licence authorising the relocation of fauna

Management Objective	Key Management Action	Management Target	Monitoring	Reporting
Prevent the introduction and/or spread of weeds into the Greater Bilby habitat or adjacent areas.	• **Weed Management:** o Weed hygiene procedures will be implemented to minimise the risk of introducing new species to the site and surrounding areas. o Weed hygiene procedures include: ▪ Equipment hygiene and inspection certificates are required for all clearing/earth-moving vehicles. ▪ Vehicles and machinery to remain on approved and/or existing tracks to limit the risk of weed invasion within undisturbed areas. ▪ Movement of machines and other vehicles will be restricted within the clearing areas and/or existing tracks. ▪ Weed control as required.	• All earthworks machinery will enter the clearing area with a hygiene certificate.	• Environmental inspection records of earth-moving equipment and hygiene certificates before the commencement of clearing activities.	• Records of site induction. • Records of hygiene certificates /vehicle inspections.
Prevent the introduction of fire and/or the spread of fire.	• **Fire Management:** o Conduct site inductions that include fire prevention and control measures. o No unauthorised off-road driving to prevent vehicles and machinery from igniting grassfires. o All clearing machinery/vehicles will carry portable fire extinguishers.	• No significant fire event attributable to the 9.8 ha clearing program.	• Induction and training records. • Inspection of the portable firefighting equipment. • Inspection of hazard/incident records	• Records of site induction. • Records of any fire event(s).
No Bilby mortality as a result of vehicle collisions.	• **Vehicle Management:** o Induction training on Greater Bilby presence and vehicle speed limits. o All clearing activities will occur during daylight hours (i.e., 6.00 am to 6.00 pm). o Vehicles and machinery are to remain on designated roads unless in the case of an emergency.	• No direct loss or serious injury to Bilbies from vehicle strikes.	• Environmental induction records. • Environmental incident records. • Inspection of incident records.	• Records of site and induction. • Report mortality incidents to DWER and DBCA within 48 hours.

Management Objective	Key Management Action	Management Target	Monitoring	Reporting
General Environmental Management Actions				
Erosion	• Vehicles and machinery to remain on approved and/or existing tracks to reduce soil compaction. • Undertake remediation and rehabilitation of areas that are temporarily disturbed during construction.	• Vehicles and machinery to remain on approved and/or existing tracks to reduce soil compaction. • Undertake remediation and rehabilitation of areas that are temporarily disturbed during construction.	• Monitoring the access tracks and cleared bore pads for evidence of erosion.	• Not applicable

4.4. Implementation

Incident reporting and investigations will follow project-specific procedures to determine root causes and implement corrective actions. All incidents and non-compliances will be reported and investigated, and measures will be taken to prevent recurrence. Environmental incidents will be reported to relevant agencies where applicable.

In case of non-compliance, the following procedures will be implemented:

- Report the incident within seven days and investigate the cause.
- Implement contingency actions, which may include:
    - Reviewing management measures
    - Enhancing training for personnel
    - Increasing protective measures as needed.
- Monitor outcomes.

4.4.1. Greater Bilby Surveys

A pre-clearing survey for Greater Bilby underpins the implementation of this plan. The following standard Greater Bilby survey techniques will be employed:

- Searches by a fauna specialist/ecologist for signs, including scats, tracks, burrows and diggings in suitable Greater Bilby habitats within and adjacent to the approved clearing area boundaries.
- The survey will be undertaken in broad alignment with:
    - Guidelines for surveys to detect the presence of bilbies and assess the importance of habitat in Western Australia (DBCA 2017).
- Where evidence of recent burrow use is identified, the following actions will be undertaken:
    - The fauna specialist/ecologist will flag the location of the active Greater Bilbies burrow(s) showing signs of recent use.
    - No clearing within five (5) metres of the flagged burrow(s).
    - Monitor the flagged burrow(s) with cameras for a maximum of five days or until such time that Greater Bilbies have been observed moving on from the burrow(s) independently.
- The fauna specialist/ecologist will remove and relocate any Greater Bilby found to an area of suitable habitat in accordance with a fauna licence.

4.4.2. Reporting

The following reports will be maintained across the duration of the clearing program:

1. **General clearing activities:**
    a. The location of the clearing areas was recorded using a GPS unit set to Geocentric Datum Australia 1994/2020 (GDA94/2020), expressing the geographical coordinates in Eastings and Northings.
    b. The date that the area was cleared
    c. The size of the area cleared (in ha).
2. **Greater Bilby activities:**
    a. Where Greater Bilbies are identified and relocated, the fauna specialist/ecologist shall include the following in a report:
        i. The location of any Greater Bilbies, GPS unit set to Geocentric Datum Australia 1994/2020 (GDA94/2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees.
        ii. The date, time, vegetation type, weather conditions at each location where Greater Bilbies is captured and relocated, and the position of the relocated area using a GPS unit.
        iii. The name of the fauna specialist that relocated Greater Bilbies under the condition of a copy of the fauna licence authorising the relocation of fauna.

5. References

Commonwealth of Australia (2023). Recovery Plan for the Greater Bilby (Macrotis lagotis).

Department of Biodiversity, Conservation and Attractions (2017). Guidelines for Surveys to Detect the Presence of Bilbies, and Assess the Importance of Habitat in Western Australia. Kensington Western Australia.

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