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# OPTIMISED MARDIE PROJECT

## IMPACT RECONCILIATION PROCEDURE

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## ACKNOWLEDGEMENT OF COUNTRY

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## DOCUMENT CONTROL

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# 1 THE PROPOSAL

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Mardie Minerals Pty Ltd (Mardie Minerals) is developing the Optimised Mardie Project (Proposal) at Mardie, approximately 80 kilometres (km) southwest of Karratha, in the Pilbara region of Western Australia (WA). The Proposal will produce a high purity salt product, sulphate of potash (SoP) and other products that can be derived from sea water.

The Proposal includes the development of seawater intakes, concentrator and crystalliser ponds, processing plants, bitterns disposal pipeline and outfall diffuser, trestle jetty export facility, dredge channel, causeway, drainage channels, access / haul roads, desalination (reverse osmosis) facilities, borrow pits, pipelines and associated infrastructure including: power supply, communications equipment, offices, workshops, accommodation village, laydown areas, sewage treatment plant and landfill facility.

The Proposal is a significant amendment to the original Mardie Project (Original Proposal) approved under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (EPBC 2018/8236), and Part IV of the *Environmental Protection Act 1986* (EP Act) (Ministerial Statement (MS) 1175). It includes a higher production rate, additional concentrator and crystalliser pond areas, secondary seawater intake, quarry, and port laydown area.

The Proposal was referred under the EPBC Act and Part IV of the EP Act. The EPA released their report (EPA Report 1740) on the Proposal on 19 June 2023, and was later approved under MS 1211 on 19 October 2023. The Proposal is currently in the final stages of the EPBC Act assessment (EPBC 2022/9169).

A previous version of this Impact Reconciliation Procedure (IRP) was developed to meet the requirements of MS 1175 (Condition 13) and EPBC 2018/8236 (Conditions of Approval 26 and 27), as described in Section 2. It has been updated to include conditions provided in MS 1211 which will replace relevant MS 1175 conditions. The offset calculations in this version are based off the approved actions within MS 1211 and EPBC 2018/8236, with secondary calculations provided for EPBC 2022/9169. The disturbance footprint associated with the current Proposal design, and MS 1175 clearing to-date have been used for offset calculations. Historic clearing completed for pastoral uses and under Native Vegetation Clearing Permits (NVCP) have been excluded from the offset calculations.

This IRP will be updated once the final EPBC 2022/9169 (assessment decision pending) conditions are issued.



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## 2 CONDITION REQUIREMENTS

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### 2.1 MINISTERIAL STATEMENT UNDER PART IV OF THE EP ACT

The following conditions of MS 1211 are relevant to this IRP.

#### **B9 Pilbara Environmental Offset Fund**

B9-1 The proponent must contribute funds to the **Pilbara Environmental Offsets Fund** calculated pursuant to condition B9-2, to achieve the objective of counterbalancing the significant residual impacts to:

1. **'Good' to 'Excellent' condition native vegetation;**
2. Priority 3 **PEC** - Horseflat Land System of the Roebourne Plains;
3. critical habitat for the Pilbara olive python (*Liasis olivaceus barroni*) riparian and freshwater pool habitat; and
4. supporting habitat for northern quoll (*Dasyurus hallucatus*), grey falcon (*Falco hypoleucos*), northern coastal freetail bat (*Ozimops cobourgianus*), Pilbara leaf-nosed bat (*Macroderma gigas*).

B9-2 The proponent's contribution to the **Pilbara Environmental Offsets Fund** must be paid biennially, with the amount to be contributed calculated based on the clearing undertaken in each year of the biennial reporting period in accordance with the rates in condition B9-3. The first biennial reporting period must commence from **ground disturbing activities** of the environmental value(s) identified in condition B9-3.

B9-3 Calculated on the 2021–2022 financial year, the contribution rates are:

1. \$841 AUD (excluding GST) per hectare of **'Good' to 'Excellent' condition native vegetation** cleared as a result of the proposal within the Chichester **IBRA** subregion;
2. \$890 AUD (excluding GST) per hectare of **'Good' to 'Excellent' condition native vegetation** cleared as a result of the proposal within the Roebourne **IBRA** subregion;
3. \$1,753 AUD (excluding GST) per hectare of Priority 3 **PEC** - Horseflat Land System of the Roebourne Plains cleared or indirectly impacted for the proposal within the Roebourne **IBRA** subregion;
4. \$1780 (excluding GST) per hectare of the following values cleared as a result of the proposal:
  - (a) Pilbara olive python (*Liasis olivaceus barroni*) critical habitat
5. \$890 AUD per hectare of the following values cleared as a result of the proposal:
  - (a) Pilbara leaf-nosed bat (*Macroderma gigas*) supporting habitat;
  - (b) northern quoll (*Dasyurus hallucatus*) supporting habitat;
  - (c) grey falcon (*Falco hypoleucos*) supporting habitat; and
  - (d) northern coastal freetailed bat (*Ozimops cobourgianus*) supporting habitat.



- B9-4 The rates in condition B9-3 change annually each subsequent financial year in accordance with the percentage change in the **CPI** applicable to that financial year.
- B9-5 Where offsets are required for an area of land under condition B10 that is also subject to offsets under condition B9-3, the higher amount shall apply.
- B9-6 To achieve the objective in condition B9-1, the proponent must implement the Mardie Project Impact reconciliation Procedure (Rev 1, 29 August 2022). This procedure must:
1. spatially define the environmental value(s) identified in condition B9-1
  2. spatially define the areas where offsets required by condition B9-1 are to be exempt;
  3. include a methodology to calculate the amount of clearing undertaken during each year of the biennial reporting period for each of the **environmental values** identified in condition B9-3;
  4. state that clearing calculation for the first biennial reporting period will commence from **ground disturbing activities** in accordance with condition B9-2 and end on the second 30 June following commencement of **ground disturbing activities**;
  5. state that clearing calculations for each subsequent biennial reporting period will commence on 1 July of the required reporting period, unless otherwise agreed by the **CEO**;
  6. indicate the timing and content of the Impact Reconciliation Reports; and
  7. be prepared in accordance with Instructions on how to prepare *Environmental Protection Act 1986* Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports (or any subsequent revisions).
- B9-7 The proponent must submit an Impact Reconciliation Report in accordance with the **confirmed** Impact Reconciliation Procedure in condition B9-6.
- B9-8 The Impact Reconciliation Report required pursuant to condition B9-7 must provide the location and spatial extent of the clearing undertaken as a result of the proposal during each year of each biennial reporting period.
- B9-9 The proponent may apply in writing and seek the written approval of the **CEO** to reduce all or part of the contribution payable under condition B9-3 where:
1. a payment has been made to satisfy a condition of an approval under the *Environment Protection and Biodiversity Conservation Act 1999* in relation to the proposal; and
  2. the payment is made for the purpose of counterbalancing impacts of the proposal on matters of national environmental significance.
- B9-10 The **CEO** may grant approval to discount the amount payable under condition B9-1 (2), condition B9-1(3) and condition B9-1 (4) if the **CEO** is satisfied that the payment will offset the significant residual impacts of the proposal.
- B9-11 Condition C2 applies to the **confirmed** Impact Reconciliation Procedure required by condition B9-6 as if it were an environmental management plan.



B9-12 Failure to implement a **confirmed** Impact Reconciliation Procedure or submit an Impact Reconciliation Report as required by condition B9-7 represents a non-compliance with these conditions.

## 2.2 EPBC ACT APPROVAL

Conditions 26 and 27 of EPBC 2018/8236 are the only current EPBC Act conditions relevant to this IRP as EPBC 2022/9169 is still under assessment by the Department of Climate Change, Energy, the Environment and Water (DCCEEW). Relevant EPBC 2022/9169 conditions will be added in a revised version of the IRP when the decision on the Proposal has been made.

### Offsets

26. To compensate for the residual significant **impacts** of **clearing Pilbara Leaf-nosed Bat supporting habitat, Pilbara Olive Python critical habitat and Northern Quoll supporting habitat**, the approval holder must contribute funds to the **Pilbara Environmental Offsets Fund (PEOF)**.
27. In making the contribution to the **Pilbara Environmental Offsets Fund**, the approval holder must
- a. Comply with condition 13-6 of the **WA Approval**.
  - b. contribute funds towards an offset or offset activity that:
    - i. reduces the rate of decline of the **Pilbara Leaf-nosed Bat, Pilbara Olive Python, and Northern Quoll**;
    - ii. ensures that viable populations of **Pilbara Leaf-nosed Bat, Pilbara Olive Python, and Northern Quoll** remain in the Pilbara bioregion;
    - iii. has specified outcomes and performance indicators; timeframes and milestones for their achievement;
    - iv. includes sufficient monitoring to detect achievement of performance indicators, milestones and the outcomes; and
    - v. requires regular reporting to the approval holder of the outcomes of the monitoring.
  - c. not **commence the action** until the Mardie Project **Impact Reconciliation Procedure** has been submitted to the **Minister** for approval. If the **Impact Reconciliation Procedure** has not been approved by the **Minister** and in writing, within 6 months of submitting the **Impact Reconciliation Procedure** to the **Minister**, the **Minister** may, at least two months after so notifying the approval holder, approve a version of the **Impact Reconciliation Procedure** revised by the **Department**. The approval holder must implement the approved **Impact Reconciliation Procedure** for the remainder of the **life of the project**.
  - d. the approval holder must provide an upfront payment of 10 per cent of the total contribution to the **Pilbara Environmental Offsets Fund** as detailed by the approved **Impact Reconciliation Procedure**, within one month of the **Minister** approving the IRP, which will contribute towards achieving the outcomes set out in condition 27(b).
  - e. Make a payment once every two years, based on **evidence** of the **actual clearing footprint** starting from the date of **commencement of the action** and then for each





subsequent 24-month period, to the **Pilbara Environmental Offsets Fund** that is equivalent to or greater than the value of the following amounts on the date of this approval, by adjustment in accordance with the **CPI** from the date of this approval decision until the date on which any payment is made, of:

- i. A minimum of \$3,306 AUD (excluding GST) per hectare of **cleared Pilbara Olive Python critical habitat**, up to an allowable clearing limit of 6 hectares, and
  - ii. A minimum of \$1,653 AUD (excluding GST) per hectare of **cleared Northern Quoll supporting habitat**, up to an allowable clearing limit of 64.5 hectares and of good to excellent quality **Pilbara Leaf-nosed Bat supporting habitat**, up to an allowable clearing limit of 1,224 hectares.
- f. Submit to the **Department evidence** of each payment made under conditions 27(d) and 27(e) within 10 **business days** of the date of the payment.
  - g. Include in each **annual compliance report** to the **Department** details of progress towards, or achievement of, the outcomes specified under condition 27(b) for the **Pilbara Leaf-nosed Bat, Pilbara Olive Python, and Northern Quoll**.
  - h. Write to the **Minister**, within 10 **business days** of being aware or having concerns, that the offset outcomes specified for the **Pilbara Environmental Offsets Fund** project(s) may not be achieved.
  - i. On completion of **clearing**, submit to the **Department** a final **Impact Reconciliation Report**. The **Minister** may agree to adjust the final year's payment and notify the approval holder in writing of the adjusted final payment amount based on **evidence** of the **actual clearing footprint** provided in the **Impact Reconciliation Report**.



## 3 PROCEDURE

### 3.1 IDENTIFICATION OF THE ENVIRONMENTAL VALUES AND MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE REQUIRING OFFSETS UNDER THE PEOF

After the implementation of mitigation measures described in the Proposal's Supplementary Report and required under the MS, the Proposal is predicted to have a significant residual impact on the environmental values listed in Table 1 and the Matters of National Environmental Significance (MNES) listed in Table 2 and Table 3. All data used to calculate these values is taken from the Supplementary Report Appendix 6.1, 6.2 and 7.1 (Phoenix 2021a, 2021b & 2021c; retrieved from: <https://www.epa.wa.gov.au/proposals/optimised-mardie-project>).

The impacts to terrestrial environmental values are represented in Figure 1. The impacts to terrestrial MNES habitat are represented in Figure 2.

**Table 1: Summary of significant residual impacts – Part IV EP Act Environmental Values**

Environmental value	Other associated values	Residual Impacts	Figure reference
'Good' to 'Excellent' condition native vegetation	Foraging and dispersal habitat for the Pilbara Olive Python, Northern Quoll, Grey Falcon, Pilbara Leaf-nosed Bat, Northern Coastal Free-tailed Bat and EPBC Act Listed Migratory / Marine Bird Habitat.	Clearing of up to 3,014 ha of good to excellent condition native vegetation, including landward samphire, foraging and dispersal habitat.	Figure 1
Priority 3 PEC - Horseflat Land System of the Roebourne Plains	N/A	Clearing up to 145 ha and indirect impacts to up to 20 ha.	Figure 1
Pilbara Olive Python ( <i>Liasus olivaceus barroni</i> )	N/A	Clearing of up to 6 ha of critical habitat (riparian and freshwater pool habitats).	Figure 1

**Table 2: Summary of significant residual impacts – MNES – EPBC 2018/8236**

MNES	Residual Impacts	Figure reference
<b>Listed threatened species and communities (Sections 18 &amp; 18A)</b>		
Pilbara Olive Python ( <i>Liasus olivaceus barroni</i> )	Clearing of up to 6 ha of critical habitat (riparian and freshwater pool habitats).	Figure 2
Pilbara Leaf-nosed Bat ( <i>Rhinonictis aurantia</i> )	Clearing and disturbance of up to 1,159 ha of Good to Excellent quality foraging habitat ( <i>Triodia</i> grassland).	Figure 2
Northern Quoll ( <i>Dasyurus hallucatus</i> )	Clearing of up to 64.5 ha of foraging habitat.	Figure 2



Table 3: Summary of significant residual impacts – MNES – EPBC 2022/9169

MNES	Residual Impacts	Figure reference
<b>Listed threatened species and communities (Sections 18 &amp; 18A)</b>		
Pilbara Leaf-nosed Bat ( <i>Rhinioncteris aurantia</i> )	Clearing and disturbance of up to 342 ha of Good to Excellent quality foraging habitat ( <i>Triodia</i> grassland).	Figure 2
Northern Quoll ( <i>Dasyurus hallucatus</i> )	Clearing of up to 15.5 ha of foraging habitat.	Figure 2
Grey Falcon ( <i>Falco hypoleucos</i> )	Clearing of up to 695 ha of good to excellent condition foraging habitat.	Figure 2







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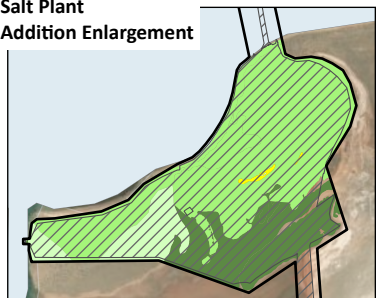
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-  Indicative Disturbance Footprint
-  Historical Clearing
-  Highways

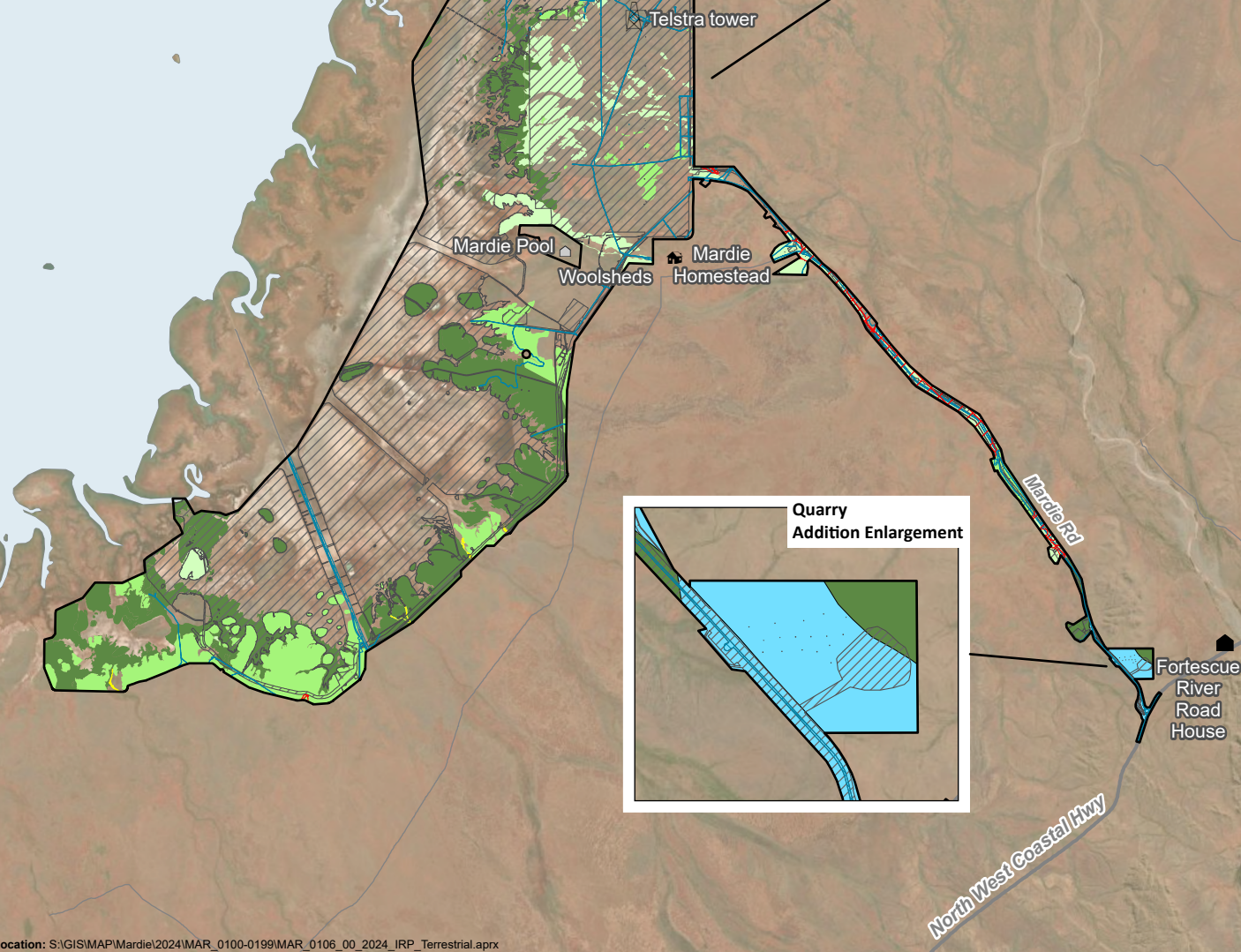
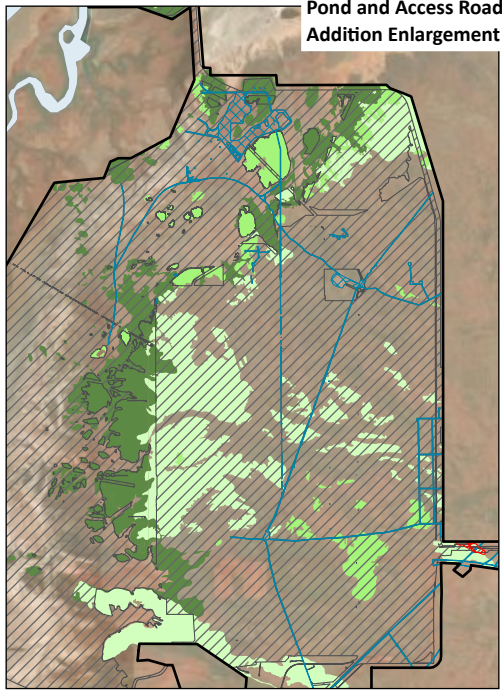
**Environmental Values**

-  Priority 3 PEC - Horseflat Land System of the Roebourne Plains
-  Pilbara Olive Python Critical Habitat
- Good-to-Excellent Native Vegetation (Roebourne)
  -  Excellent
  -  Very Good
  -  Good
- Good-to-Excellent Native Vegetation (Chichester)
  -  Excellent

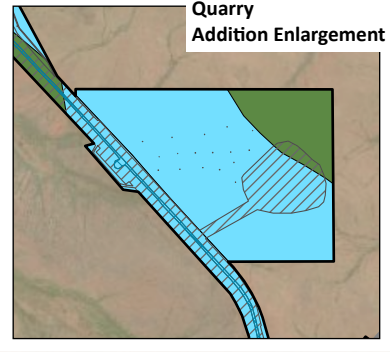
**Salt Plant Addition Enlargement**



**Pond and Access Road Addition Enlargement**



**Quarry Addition Enlargement**



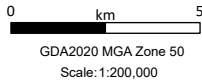
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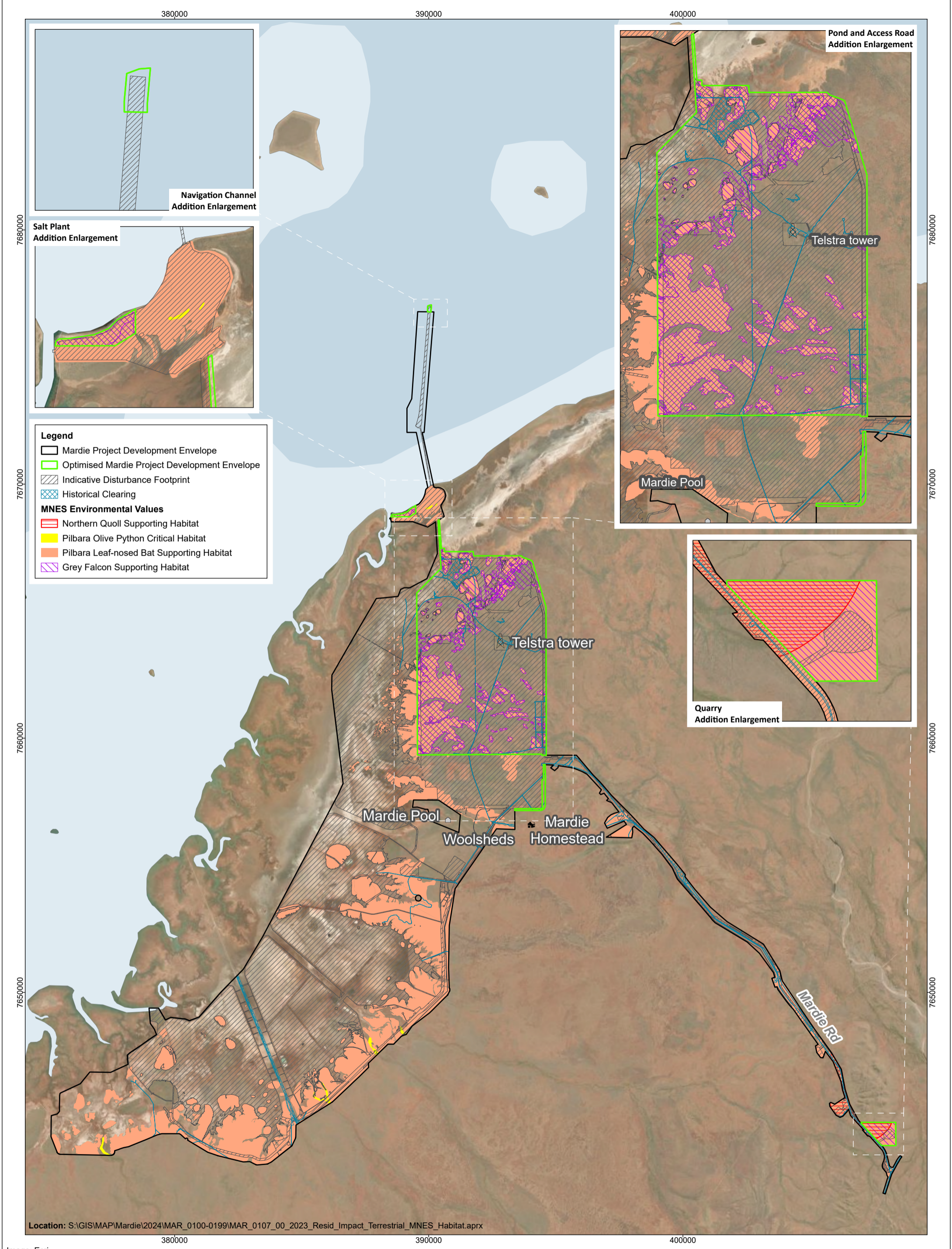


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**Mardie Project**  
**Significant Residual Impacts to Terrestrial**  
**Environmental Values (Optimised Proposal)**

Figure:

**1**

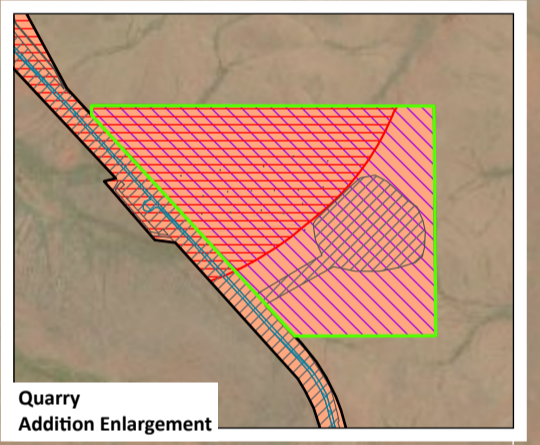
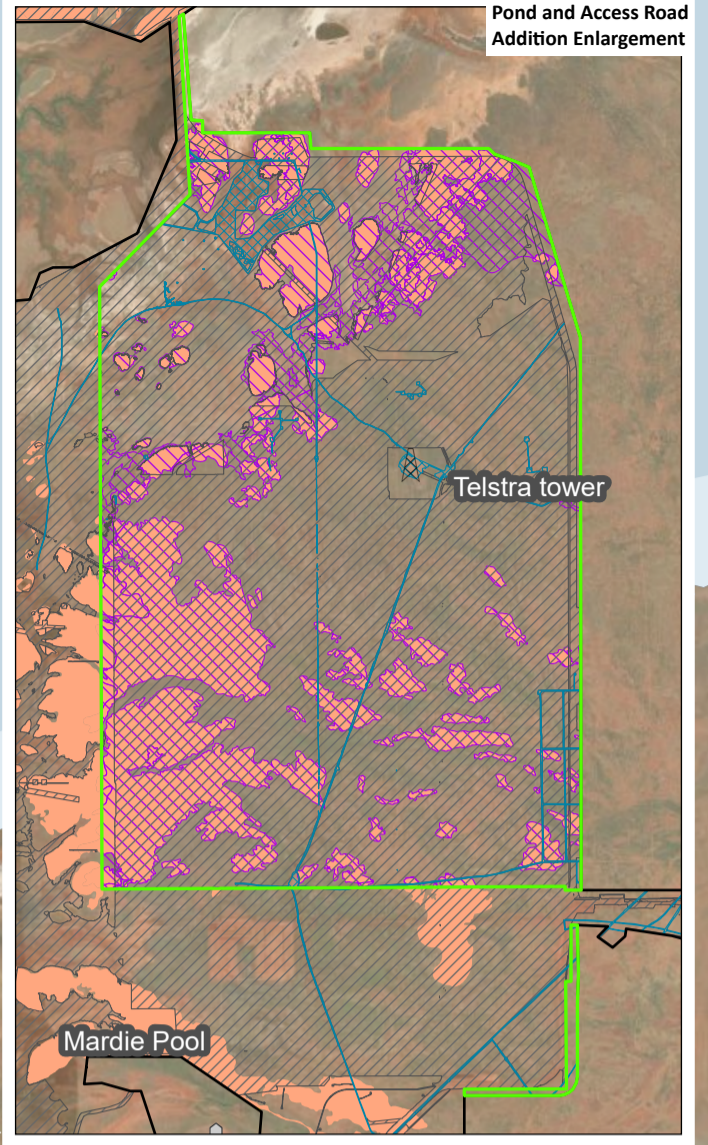
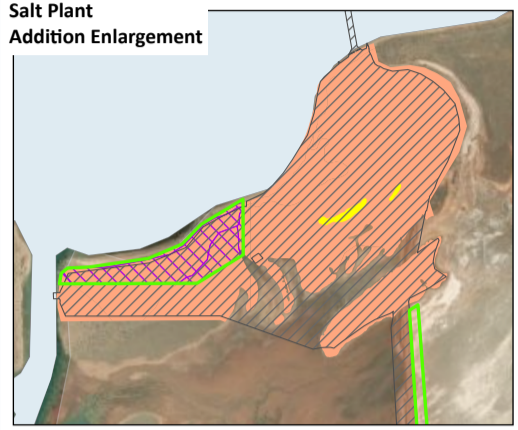
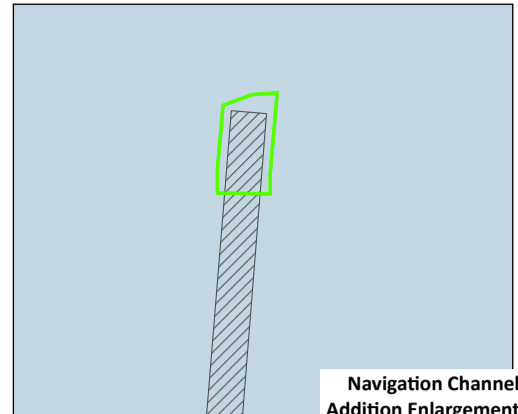


**Legend**

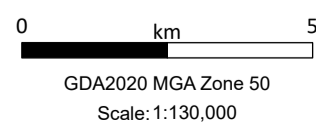
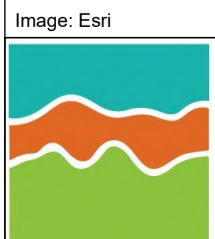
- Mardie Project Development Envelope
- Optimised Mardie Project Development Envelope
- Indicative Disturbance Footprint
- Historical Clearing

**MNES Environmental Values**

- Northern Quoll Supporting Habitat
- Pilbara Olive Python Critical Habitat
- Pilbara Leaf-nosed Bat Supporting Habitat
- Grey Falcon Supporting Habitat



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**Mardie Project  
 Significant Residual Impacts to  
 Terrestrial MNES Habitat  
 (Original Proposal and Optimised Proposal)**

Figure:  
**2**

## 3.2 DETAILS OF PROPOSED OFFSETS

The Interim Biogeographic Regionalisation for Australia (IBRA) divides the Australian continent into 89 bioregions and 419 sub regions. IBRA regions represent a landscape-based approach to classifying the land surface, including attributes of climate, geomorphology, landform, lithology and characteristic flora and fauna. The IBRA is a key tool in identifying land for conservation.

The EPA has identified an increase in project applications and the clearing of native vegetation within the Pilbara IBRA Region. To address the cumulative impacts which could significantly impact environmental values and MNES in the region, the EPA has recommended that offset conditions are established for any new proposals involving the clearing of native vegetation in IBRA subregions where extensive clearing has occurred.

The Proposal is located within the Roebourne and Chichester subregions. The Roebourne subregion has recently been allocated a contribution amount per hectare for impacts assessed under the EP Act. The EPBC Act MNES are categorised as ‘critical’ where habitat is utilised by significant species as shelter / denning / roosting habitat and ‘supporting’ where habitat is utilised by significant species for foraging and / or dispersal. Where there is a residual significant impact that relates to both State and Commonwealth impacts then the higher of the two rates will be applied to meet both State and Commonwealth requirements (refer to Section 3.3.1 for methodology).

In view of the significant residual impacts and risks of the Proposal, Mardie Minerals is required to contribute funds to the PEOF for the clearing of the items identified in Table 4. This procedure outlines the process for determining the area of vegetation disturbed within the Proposal’s footprint and subsequent offset contribution to the PEOF. The location of environmental values is shown in Figure 1, and the location of MNES is shown in Figure 2. The residual impact values from MS 1211, EPBC 2018/8236, EPBC 2022/9169 (pending), the current disturbance footprint, and clearing completed to-date for MS 1175 (covered by previous Mardie Project IRP) were used to calculate the ‘Hectares to be offset’ area for each condition. Historic clearing under other authorisations has been excluded from the offset calculations.

**Table 4: Environmental values from MS 1211, and MNES from EPBC 2018/8236 and pending EPBC 2022/9169 that require offsets**

Environmental values / MNES	IBRA subregion / habitat category	Approval / Condition	Hectares to be offset	Offset rate documented (\$AUD/ha)	Total Amount to be Offset
Pilbara Olive Python ( <i>Liasus olivaceus barroni</i> )	Critical habitat (riparian and freshwater pool habitat) – Roebourne subregion	<u>EPBC 2018/8236</u> 27(e)(i)	4.1 ha	\$3,306	\$13,555
		<u>MS 1211</u> B9-3(4)	0 ha <sup>1</sup>	\$1,780	N/A <sup>1</sup>
Priority 3 PEC - Horseflat Land System of the Roebourne Plains;	Roebourne	<u>MS 1211</u> B9-3(3)	72.3 ha	\$1,753	\$126,742
Pilbara Leaf-nosed Bat ( <i>Rhinonicteris aurantia</i> )	Supporting habitat (good to excellent quality <i>Triodia</i> grassland) –	<u>EPBC 2018/8236</u> 27(e)(ii)	1,504.4 ha	\$1,653	\$2,486,773
		<u>EPBC 2022/9169</u>	0 ha <sup>1</sup>	\$1,653	N/A <sup>1</sup>



Environmental values / MNES	IBRA subregion / habitat category	Approval / Condition	Hectares to be offset	Offset rate documented (\$AUD/ha)	Total Amount to be Offset
	Roebourne subregion	TBD			
Northern Quoll ( <i>Dasyurus hallucatus</i> )	Supporting habitat - (low rocky hills) - Roebourne subregion	<u>EPBC 2018/8236</u> 27(e)(ii)	0 ha <sup>2</sup>	\$1,653	N/A <sup>2</sup>
		<u>EPBC 2022/9169</u> TBD	0 ha <sup>2</sup>	\$1,653	N/A <sup>2</sup>
Grey Falcon ( <i>Falco hypoleucos</i> )	Supporting habitat - Roebourne subregion	<u>EPBC 2022/9169</u> TBD	193.6 ha <sup>3</sup>	\$1,653	\$320,021 <sup>3</sup>
Pilbara Leaf-nosed Bat Northern Quoll Grey Falcon Northern Coastal Free-tailed Bat	Supporting habitat - Roebourne and Chichester subregions	<u>MS 1211</u> B9-3 (5)	714.9 ha <sup>4</sup>	\$890	\$636,261 <sup>4</sup>
'Good' to 'Excellent' condition native vegetation.	Roebourne	<u>MS 1211</u> B9-3(2)	0 ha <sup>1</sup>	\$890	N/A <sup>1</sup>
'Good' to 'Excellent' condition native vegetation.	Chichester	<u>MS 1211</u> B9-3(1)	0 ha <sup>1</sup>	\$841	N/A <sup>1</sup>
<b>Total to be Offset*</b>					\$3,583,352
<b>10% Initial Contribution</b>					\$358,335

<sup>1</sup> This environmental value/MNES overlaps with other environmental values/MNES listed above that have equal or higher offset rates, and therefore this area is subject to those higher rates (i.e. offsets are not duplicated).

<sup>2</sup> This environmental value/MNES completely overlaps with Pilbara Leaf-nosed Bat supporting habitat, which is charged at the same offset rate (i.e. offsets are not duplicated).

<sup>3</sup> This area does not include Grey Falcon Supporting Habitat within the Original Proposal Development Envelope (DE), and is in addition to Priority 3 PEC, Pilbara Leaf-nosed Bat supporting habitat, and Pilbara Olive Python critical habitat (i.e. offsets are not duplicated).

<sup>4</sup> This area only includes Northern Coastal Free-tailed Bat Supporting Habitat and Grey Falcon Supporting Habitat (within the Original Proposal DE), as all other environmental values are subject to higher offset rates listed above (i.e. offsets are not duplicated).

\*Total amounts are subject to change; the rates will be adjusted in accordance with the percentage change in the Perth CPI from the date of the approval decision until the applicable financial year in which the payment is made.



### 3.3 METHODOLOGY

#### 3.3.1 METHODOLOGY TO DETERMINE EXTENT OF EACH ENVIRONMENTAL VALUE AND MNES

The Proposal includes clearing of several environmental values and MNES, some of which overlap spatially. To ensure the extent of clearing is counted accurately and the maximum offset value is provided without double counting, Mardie Minerals has adopted a hierarchical approach based on a descending offset rate. The clearing will be calculated using the highest of the offset values that are applicable to that cleared area, in this order:

1. Pilbara Olive Python critical habitat - \$3,306 / ha;
2. Priority 3 PEC - Horseflat Land System of the Roebourne Plains - \$1,753 / ha;
3. MNES supporting habitat (including Grey Falcon supporting habitat within the Optimised Proposal DE) – \$1,653 / ha; and
4. Northern Coastal Free-tailed Bat supporting habitat and Grey Falcon supporting habitat (within the Original Proposal DE)- \$890 / ha.

All other offset requirements overlap with at least one of the above offset requirements or have a lower rate and therefore additional offsets are not required for those values. The offset rate hierarchy is summarised in Figure 3.

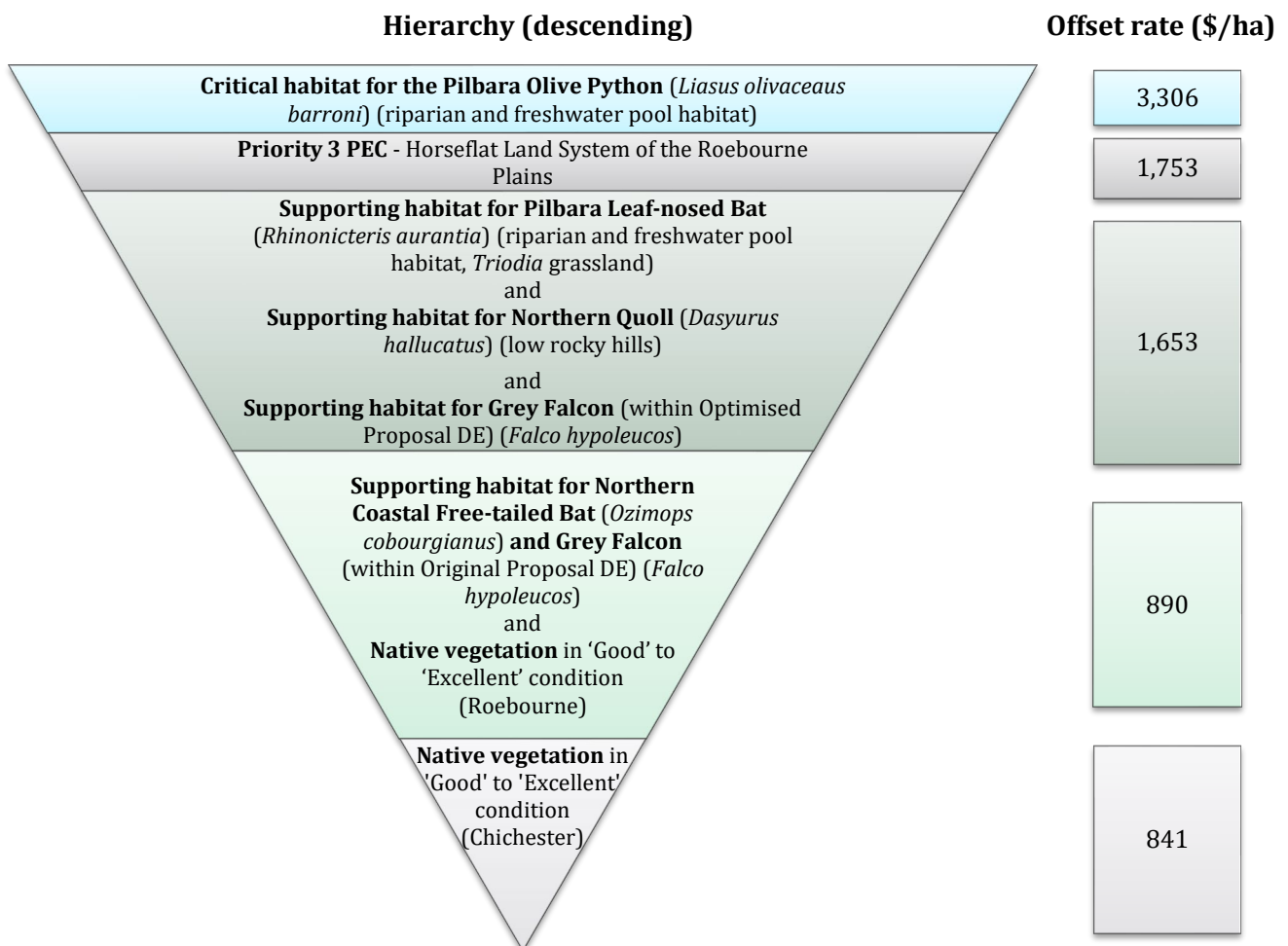


Figure 3: Offset rate hierarchy





Where two or more environmental values/MNES overlap, the environmental value/MNES with the highest rate is used to calculate the offset payment. The area to be offset for the environmental value/MNES with the lower rate is adjusted to remove the overlap. Figure 4 shows an example of how the offset rate hierarchy can be applied to a selection of environmental values/MNES.

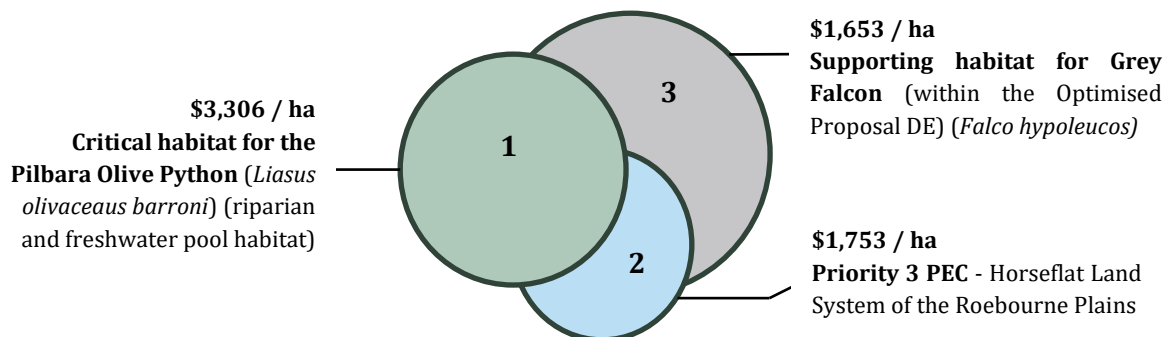


Figure 4: Application of the offset rate hierarchy (example)

In the example above, the total clearing area of *Critical habitat for the Pilbara Olive Python* will be counted in determining the offset value (100% of area 1). The area of *Priority 3 PEC - Horseflat Land System of the Roebourne Plains* is calculated by deducting the overlap of *Critical habitat for the Pilbara Olive Python* (area 2 minus the overlap with area 1). The area of *Supporting habitat for Grey Falcon* to be offset is calculated by determining what is remaining after deducting the overlap with the other two areas.

### 3.3.2 METHODOLOGY TO DETERMINE CLEARING EXTENT

In order to accurately reconcile the clearing completed, baseline information will be used to determine the appropriate value (\$AUD/ha) for the offset in accordance with Table 4.

The process for undertaking clearing is outlined in the Mardie Minerals' Land Clearing Procedure and Site Disturbance Permit Procedure. Clearing requirements are initially identified and planned through an internal Ground Disturbance Permit (GDP). The GDP ensures all clearing complies with the Proposal's existing environmental approvals.

Approved clearing is progressively tracked using the Proposal's Clearing Database. This will track both clearing which has been applied for via a GDP and actual clearing that has been undertaken. Once an area has been cleared, the Spatial Services department will generate coordinates for the cleared area and then revise the Site Plan and Clearing Database to provide a spatial representation of clearing to-date. The clearing database is to be updated regularly, using the current site plan which is provided monthly by the site Spatial Services department.

In addition, an aerial survey will be undertaken annually to verify the clearing within the Clearing Register. The timing of survey coincides with the submission of annual environmental reporting requirements to the Department of Mines, Industry Regulation and Safety.

The verification involves a visual comparison of clearing area coordinates mapped on the Proposal's Site Plan with the aerial image. Any inaccuracies in the extent of clearing in the Site Plan will be rectified based on the aerial image to produce final clearing polygons. This data will be supplied as part of the Impact Reconciliation Report (IRR) for submission to DWER and DCCEEW.



The Clearing Database includes the following information:

- Method of clearing;
- Reason / justification;
- Amount required;
- Timing; and
- Baseline ecological value.



## 4 REPORTING

### 4.1 FREQUENCY AND TIMING

The reporting schedule is provided in Table 5. The clearing calculation for the first biennial reporting period will commence from ground disturbing activities in accordance with condition B9-2 of MS 1211 and end on the second 30 June following the commencement of ground disturbing activities. Each subsequent clearing calculation will be from 1 July to 30 June, two years later.

Each IRR will be provided to DWER within three months of the end of each reporting period. Evidence of payments will be provided to DCCEEW within 10 business days of the date of payment.

**Table 5: Reporting period and frequency of the IRP**

Period	Action	Timing
Approvals	Proposal MS issued	19 October 2023
	Proposal EPBC issued	TBD
	Commencement of works relevant to the Proposal	TBD
Upfront payment (if not already satisfied under the original Mardie Project)	Initial payment (as part of the Commonwealth requirement for 10% of the overall clearing allowable contribution to the PEOF) as detailed by the approved IRP	Within one month of EPBC Approval of IRP
	Approval holder to submit evidence of payment into PEOF account to DCCEEW.	Within 10 business days of the date of the payment
PEOF outcomes not achieved	Write to the Minister that the offset outcomes specified for the PEOF project(s) may not be achieved.	Within 10 business days of being aware of having concerns
Annual reporting period(s)	Include in each annual compliance report to DCCEEW details of progress towards, or achievement of, the outcomes specified under condition 27(b) for Pilbara Leaf-nosed Bat, Pilbara Olive Python and Northern Quoll.	For each 12 month period following the date of commencement, or otherwise in accordance with an annual date that has been agreed to in writing by the Minister.
Biennial Period 1 (complete)	First biennial reporting period	7 January 2022 to 30 June 2023
	Aerial survey/ground truthing	July 2023
	IRR submitted to DWER	30 September 2023
	Make a payment, based on evidence of the actual clearing footprint starting from the date of commencement of the action, to the PEOF.	Every two years, starting from the date of commencement of the action
	Evidence of payment submitted to DCCEEW	Within 10 business days of the date of the payment
Biennial Period 2 (current period)	Second biennial reporting period	1 July 2023 to 30 June 2025
	Aerial survey/ground truthing	July 2025
	IRR submitted to DWER	30 September 2025
	Make a payment, based on evidence of the actual clearing footprint starting from the date of commencement of the action, to the PEOF.	Every two years, starting from the date of commencement of the action
	Evidence of payment submitted to DCCEEW	Within 10 business days of the date of the payment



Period	Action	Timing
Biennial Period 3	Third biennial reporting period	1 July 2025 to 30 June 2027
	Aerial survey/ground truthing	July 2027 (where required)
	IRR submitted to DWER	30 September 2027 (where required)
	Make a payment, based on evidence of the actual clearing footprint starting from the date of commencement of the action, to the PEOF.	Every two years, starting from the date of commencement of the action
	Evidence of payment submitted to DCCEEW	Within 10 business days of the date of the payment (where required)
On completion of clearing	IRR submitted to DCCEEW	On completion of clearing required for the Proposal

The contribution to the PEOF will be paid biennially, with the amount to be contributed calculated based on the clearing undertaken in both years of the biennial reporting period, and the contribution calculated on the basis of the real value of the payment per hectare cleared being the same as the amounts specified in the EPBC Act approval decision at the date the approval decision was made (plus CPI adjustments).

The IRR will confirm the area and the relevant values of the vegetation cleared in order to determine the value of the biennial offset payment. Dollar/hectare rates will be as specified in Table 4. The real value of contributions will be adjusted in accordance with the percentage change in the CPI applicable to the financial year in which the payment is made.

## 4.2 CLEARING AND RECONCILIATION

Each IRR shall be structured in the manner prescribed in the EPA '*Instructions on How to Prepare EP Act Part IV IRPs and IRRs, July 2024*', using the template provided in the link below:

<https://www.epa.wa.gov.au/forms-templates/instructions-preparing-impact-reconciliation-procedures-and-impact-reconciliation>.

Each IRR shall include the following information:

- Project background;
- Summary of MS and EPBC reporting condition requirements;
- Summary of the environmental values/MNES covered by the IRP;
- Purpose for clearing undertaken within the reporting period;
- A table showing the current extent of clearing (ha), the rate/hectare for each clearing matter and an estimate of the total amount due - EPA to calculate the final amount payable for the reporting period; and
- A figure showing the current extent of clearing.



## GLOSSARY

Term	Meaning
AUD	Australian Dollar
CEO	The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the EP Act, or his delegate
CPI	Perth Consumer Price Index
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DE	Development Envelope
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EPA	Environmental Protection Authority
EPBC Act	<i>Environmental Protection and Biodiversity Act 1999 (Cth)</i>
ERD	Environmental Review Document
GDP	Ground Disturbance Permit
GST	Goods and services tax
ha	Hectare
IBRA	Interim Biogeographic Regionalisation for Australia
IRP	Impact Reconciliation Procedure
IRR	Impact Reconciliation Report
km	kilometre
ktpa	Kilotonnes per annum
Mardie Minerals	Mardie Minerals Pty Ltd
MNES	Matters of National Environmental Significance
MS	Ministerial Statement
Mtpa	Million tonnes per annum
NVCP	Native Vegetation Clearing Permit
Original Proposal	The Original Mardie Project
PEC	Priority Ecological Community
PEOF	Pilbara Environment Offsets Fund
Proposal / Optimised Proposal	The Optimised Mardie Project
SoP	Sulphate of Potash
WA	Western Australia

